

# MICHIGAN FARMER

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### Farm Department.

Conducted by J. H. Brown, who lives on his farm at Cilmax, Mich., which is conducted as the Michigan Farmer Experiment Farm. All correspondence for this department should be sent to Cilmax.

#### THE EDITOR'S FARM NOTES.

**LAYING OUT AND PLOWING A FIELD.**  
We plow in lands and prefer this plan to any other on our farm. Every bit of soil is turned in one direction one season for a crop and reversed the next time the field is plowed.

A friend who has never plowed in lands wishes to know how he can "plow away from the fence," in an irregular field somewhat like the one shown in the cut on page 114. Having plowed such irregular fields many times during our agricultural pilgrimage, we append our "recipe."

The cut represents a field 40x80 rods (nearly) bordering on a river, lake or marsh. To plow away from the fence, our plan is as follows:

Drive the team across and work out "headland," B 1, by making a very shallow furrow. This should be far enough from the fence to afford plenty of room for swinging the team and plow when turning at the ends of lands. We make it from five to seven paces from the fence.

In making headland B 2, drive as nearly as possible the same distance from the edge of the lake or marsh (if you plow close to the brink), following the conformation of the bank.

When plowing away from the fence, we leave but three "dead furrows" in a field 40 rods wide. When this is reversed, or we plow up to the fence, we leave four dead furrows. Some farmers make from six to ten dead furrows in a field of that width, but we prefer wide lands. The cut shows but two dead furrows.

In our fields we would, in a case like above, find barely visible dead furrows left at C. C. C. We strike out our back furrows by turning two shallow furrows into each one, forming new back furrows.

We would "back furrow off" the east land until we reached the imaginary line B 3. This would leave an unplowed strip on the east side the same width as the headland B 1. The west land C, would be plowed off in the same way.

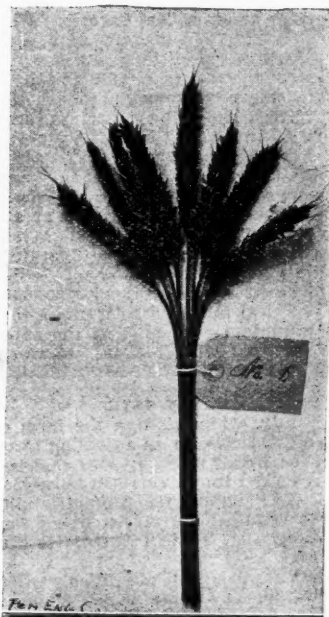
The middle land would be plowed off until that plowed land was about the same width as the unplowed land each side. Then the plow would be turned in the opposite direction when swinging around the headlands.

After the inside lands are plowed, we commence at one corner (E, for instance), and plow away from the fence all the way around until the fence is reached.

The next time this field was plowed we would plow around the outside, turning up to the fence, letting the first shallow furrow fall into the old back furrow. Never turn closer to the fence than you can plow away.

After reaching B 1, we would stop plowing around the outside and commence plowing in lands. Then the old dead furrows, D, D, would form the new back furrows, the whole job being a reversal of the previous plowing.

We plow straight, even with a sulky plow, and never leave any high back furrows or deep dead furrows. In "striking out a land," we turn the first furrow very shallow. The opposite furrow, made in coming back, is also plowed shallow, and turned so as to



squarely meet the first furrow—not lap over it. The last two furrows in finishing a land are made lighter, so as to leave a shallow dead furrow.

Not every farmer is a good plowman, and yet he should be. There is much poor plowing to be seen throughout the country, and very little excuse for it. So much improvement could be made that we would like to see "plowing matches" revived again.

The Grange and Farmers' Clubs could take it up and have an occasional contest at the homes of some members during this season of the year. What do our friends think about it?

#### THE SULKY PLOW.

We do nearly all our plowing with such a plow, having a three-horse team attached. The plow we use is a perfect success in doing good work, and runs as easy for the team as any walking plow we ever saw.

A correspondent in a western farm journal, writing about sulky plows, says:

It has made things easier for the driver, but harder for the team. I have two riding plows, both good, but I find that it is about as fatiguing for three horses to draw either of these plows as it is for two horses to draw a common hand plow of the same size at the same depth. The riding plow is the plow for boys, old men, lazy men and cripples. It can be set by means of its levers so as to run at the desired depth, then anybody who can manage a team can

plow and do fairly good work and a reasonable amount of it, but it is done at the expense of an extra horse and harness and with three times the cost for a plow.

I have no word of disparagement for the riding plow, because it has come to stay, and I fully appreciate the ride when I am a little tired or footsore. The point I wish to make is that the riding plow is the more expensive, and this extra expense brings nothing but comfort to the driver. A good plowman can turn just as good a furrow by hand as he can by wheels and levers. The inventor should try to modify the riding plow so that it will rest the horse as well as the man.

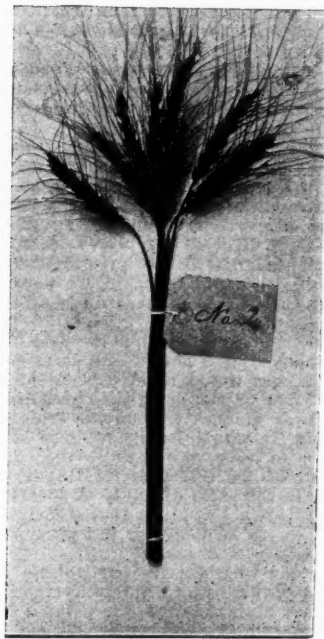
Of course, there are sulky plows that are actual "horse killers," and we have seen walking plows that are worthless for good service, but the above does not apply to our sulky plow, which we have used for several years. We would not be without it.

We can do better work and more of it, in a day, with this plow, and it is actually easier for both man and team, than any walking plow having the same number of cubic inches turning capacity, by actual dynamometer test.

#### DAWSON'S GOLDEN CHAFF WHEAT.

The cut and description of the three new wheats will answer several inquiries that have reached us recently. There is a great demand for Dawson's Golden Chaff, and those having seed for sale will do well to advertise it in The Farmer.

More than 20 orders have come to us

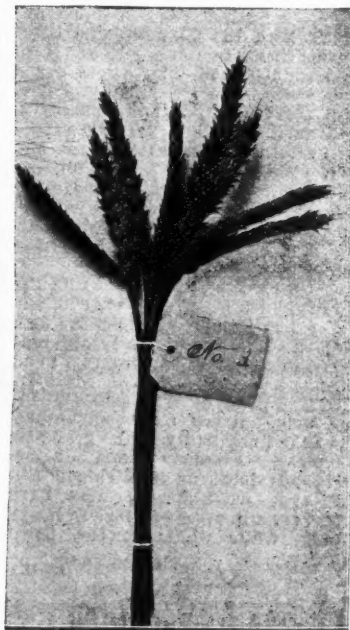


and we cannot fill one-third of them. We have not threshed yet, but expect to this coming week. We had but a few acres sown on corn ground, and it is the finest wheat we have seen in years.

The straw is stiff, has bald heads and the kernels are large, plump and very white. On some heads we counted 46 kernels. The writer cut this wheat

with the binder and he never had nicer wheat to bind or handle in setting up and stacking.

We hope the information and cut, furnished by our Associate, will answer all the inquiries sent us regarding the best new winter wheat for Michigan farmers to sow. Several millers have also written us, asking for seed, and praising Dr. Kedzie for his efforts in introducing this wheat into the State. We have no more seed



for sale, so please do not send orders for any.

We highly recommend Dawson's Golden Chaff wheat to our brother farmers as superior in many respects to any wheat we have grown since the Clawson first came into the State. This is from a farmer's standpoint, and you all know what our honored friend and chemist, Dr. Kedzie, says about it.

#### NEW VARIETIES OF WHEAT.

Michigan has a good average crop of winter wheat this season, so far as yield is concerned, and it is of unusually good quality. There has been but little smut or rust reported, and the grain is plump and clean.

A good many of our readers have been testing new varieties, and quite a few of them sowed plots of Dawson's Golden Chaff, and others have tried Volgt's White Star. Quite a lot of inquiries have been received regarding Dawson's Golden Chaff from those who are thinking of giving it first place in their next crop. We don't know that we can do better than give the descriptions and illustrations of three varieties printed in the Farmer a year ago, adding that the opinions then hazarded have been fully sustained by practical results this season.

Illustration No. 1 is a sample of Dawson's Golden Chaff, grown on the Agricultural College farm. It is a white wheat which originated in the Province of Ontario, Canada, where it



has been grown in competition with a large number of the best known Canadian and American wheats at the Guelph Agricultural College, and invariably surpassed all others in yield. It is a very hard white wheat, and when the grains are cut in two shows a rather dark color from the amount of gluten it contains. We should say, judging from the hardness of its kernels and the appearance of the inside of the grain, that it is what millers would call a strong wheat—that is, has a larger amount of gluten in proportion to starch than white wheats generally do. As will be seen, it is a bald wheat, the heads of good length, the kernels plump and even, the straw stout, and a promising variety.

No. 2 is a wheat from Buda-Pesth, the great milling center of Austro-Hungary. It is a heavily bearded wheat, straw light but hard, head short, kernel small, and very hard, similar to the best red wheats, and undoubtedly a good milling wheat, making a strong flour, but not the whitest in color. We doubt if it yields as well as the other two varieties, but of this we have nothing in the way of facts to judge by, not yet having any report of the yield.

No. 3 can be put down as a Michigan wheat, but of unknown origin. It was first brought to the attention of Dr. Kedzie, of the Agricultural College, by a Grand Rapids miller, and was then known as Corinth Clawson, because first grown near Corinth, Gaines township, in Kent County. It was thought to be the old Clawson, but Dr. Kedzie, upon investigation, found it to be a distinct variety, much less starchy than the Clawson, the berry differing from that variety, and containing much more gluten. It has a larger berry than No. 1, very plump, and is also softer, and more starchy in appearance when cut. It has a very long head, a strong heavy straw, and should yield well. The flour, while not so strong as that from the Golden Chaff, should be very white and fine. It has been named Voigt's White Star, Mr. Voigt being the party who first called attention to this variety.

Reports received at this office of the yield of Golden Chaff show that its fine promise has been more than fulfilled. Statements showing yields in different sections of the State run from 35 to 43 bushels per acre, with one party reporting a yield of 47 bushels on a small field. Every correspondent refers to the fine quality of the grain, its plumpness, evenness and heavy weight. It looks as if Michigan had finally got what her farmers have wanted for a number of years—a heavy yielding white wheat of the finest quality.

R. G.

For the Michigan Farmer.

## HOME MADE COOKER.

Having received many hints from my brother farmers through your valuable paper, I send you a description of a bean-cooker which I made some time ago.

I obtained cull beans at \$2.50 per ton and found they made an excellent hog feed, after being boiled.

As I could not afford to pay \$2 for a patent cooker, I tried boiling them in a cauldron kettle. This was a slow and unsatisfactory method, so I hit upon the following plan:

Having two 3-inch wagon tires, I took them to the blacksmith shop and had one cut down to fit the outside of my kettle. The other was cut into three 36-inch strips for legs, turned up at right angles at the bottom about four inches.

I riveted these legs onto the rim. Then I riveted a jacket of the heaviest sheet iron I could buy inside this frame. I put a door in the front of the jacket and a stovepipe containing a damper in the back. Then I set the kettle in the top of my frame and covered it with a sheet-iron cover.

This makes a cooker which is satisfactory in every way and cost only \$4, completed.

Eaton Co., Mich.

E. P. CRITTENDEN.

(This is a valuable thing to have on the farm, and it would pay many farmers to use these cookers more than they do, especially in feeding hogs, at certain times of the year.)

If we mistake not, one of our advertisers makes just such a cooker as this, and we should think the manufactured article complete could be bought for less than the kettle and the attachments cost you. However, we do not know the price thereof.

A cooker, arranged as friend Crittenden describes, will save enough fuel, in time, to pay for the apparatus, and the fire is more easily controlled.—Ed.)

For the Michigan Farmer.

## CORN STOVER TIES.

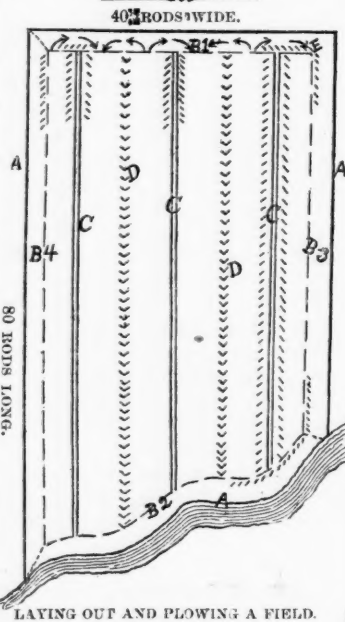
I used binder twine this year. Tarred twine is cheaper, for you can save them several years.

I have a board one-half the length I want the strings; three feet is long enough. Wind the twine around the board, then cut once anywhere. Tie a knot in each end and pass the string around with the right hand, grasp it with the left, draw with the right hand tight, pass that end under the left and around under knot, bring back and tuck under the band.

It is quicker than to use a loop, and when you feed out your stalks it is so easy to untie. Take the end that is tucked under, and, with a little jerk, the bundle is untied.

Tarred string costs about six cents per pound, and some is heavier and some is better than others. A three-foot length weighs about two and one-half ounces, and is nearly the same as J. H. Brown speaks of.

Jackson Co., Mich. E. L. MOORE.  
(Of all the ties and material suggested, we prefer friend Moore's on many accounts.—Ed.)



LAYING OUT AND PLOWING A FIELD.

For The Michigan Farmer.

## FARM COMMENTS.

## WET PLOWING.

Probably there is nothing on the average farm that will result in more injury than plowing soil when it is too wet. It not only injures the land for that year, but for several years to come. Nevertheless, wet plowing is one of the many things that is sometimes difficult to avoid.

We had a little practical experience this spring. As is well known to the majority of farmers, the past planting season was very backward. When we began plowing for corn it was just a year later than when we were preparing to plant the year previous.

We had a twenty-acre field ahead of us, and one man to do the work. For the most part the field was in good condition, but there were several spots where the ground was anything but right. These wet places were so distributed that it was practically impossible to avoid them, so we plowed right through them, regardless of the condition of the soil.

Taken as a whole, while the field was passable, it was not in first-class condition, nor would it have been for at least five or six days, and perhaps a week or more. During an ordinary season, it would have doubtless been better to have waited until the condition of the soil was right; but we were in the same difficulty of scores of other farmers—we felt that something had got to be done, so the plow was started.

As the weather was particularly favorable, there was little noticeable difference until the corn was planted and had begun to show itself. Then and from then on the difference was very evident. The corn which had been planted in the land plowed when in suitable condition simply boomed and has been at it every since, but the seed that had fallen in the portion which had been worked when unfit, has, comparatively, done little or nothing.

The writer began plowing in lands on the west side of the field and worked towards the east, hence, by the time we had reached the latter portion the soil had been constantly improving until it was in excellent con-

dition. The result of this was very plainly seen later, when the corn had been in the ground from four to six weeks. It was almost possible to define the different "lands," as they had been successively plowed, by simply noting the growth of the crop.

The question has occurred to the writer, "Would it have paid better to have waited a week or ten days more until the soil was all in good condition for the plow, than to have started just as we did?" In answering the question either way, one must take into consideration the uncertainty of the weather, the unusual lateness of the season and other work coming directly after. Often in farm work, it is simply a case of two evils, and we chose the lesser.

## THE FARMER'S FLOAT.

The writer wonders how many of the readers of The Farmer have given that log float, which has been illustrated and described in this periodical for the past two springs, a trial.

We made one a year or two ago, and find it a most excellent tool for many purposes. While it cannot, nor will not take the place of a good roller, there are many places where it does far more satisfactory work. On newly plowed land we prefer it very much to a roller. It not only smooths the land equal to a roller, but grinds to pieces many of the small lumps that the latter would merely push down into the ground to be worked up again by the next tool that is used.

In making ours, we used a white oak sapling about ten inches at the base, and from this cut the three necessary sticks; otherwise, we followed the directions as given in The Farmer. This tool, unloaded, will make a good load for two horses; hitch three horses to it and allow the driver to ride and it is prepared to do business right from the start. The writer always prefers three horses, and to have the float weighted down. The amount of weight required depends entirely on the soil; in many places its own weight is quite sufficient.

Where lumps can be crushed at all, such a float will do the work. When we strike a place where the float will not do good work, a common roller would scarcely make an impression. The practical farmer who wants a tool at a minimum cost, and, at the same time one that will do first-class work, should give one of The Farmer floats a trial.

## A HANDY GATE.

Recently, while visiting the farm of an agriculturalist in an adjoining township, the writer noted an idea that had been worked into a common barn-yard gate. The simplicity and practicability of the arrangement struck us so very favorably that we will attempt to give it here.

The gate itself did not differ particularly from any other which slides to and fro on a wheel with the exception of the middle and end cleat opposite the wheel-end. These two cleats extended up above the top of the gate some four or five feet; across the tops of these a light board, tapering to a point, was nailed parallel to the gate boards and extended out over the end some eight or ten feet.

The portion projecting beyond the gate worked over a small wheel held in position at the required height by a temporary post secured to the fastening post. The idea was to have the gate slide open on the two wheels sufficiently for a man or an animal to pass without being obliged to lift and push it back every time. In case it was necessary to pass through with a team or wagon, the gate could be lifted and carried about the same as any other.

As a general field gate, there might be a question of its practicability; but for the place for which it was intended, namely, in a yard fence, as between the house and barn, where one has to pass back and forth several times during the day and for various reasons doesn't care to put in a small gate, it answers very well and saves a good many lifts. Had we a place where such a gate would work equally as well as that one did, we would certainly have one.

## THE "SUCCESS" BARLEY.

The farmer who likes to raise barley, but dislikes the beards should give the Success a trial. It is entirely without beards, but otherwise is very similar in appearance to the old bearded kind. Those who have tried it report themselves as very well pleased with the results obtained. It has every indication of being just as good as any other variety and in some respects, perhaps, a little better, besides being entirely free from the exceedingly disagreeable features of the bearded grain.

Personally, the writer has not had

any experience with it, other than helping to get it to the threshing machine. But a neighbor of ours sowed an acre this season, and in all got one good load, which netted nearly forty bushels of first-class grain. The crop was sown on dark, sandy soil.

Any one who is a friend to barley and likes to raise it, should dispose of the old bearded variety and try the "Success." If we conclude to sow any the coming season, it will surely be the Success. Our neighbor got his yield from a hundred pounds of seed sown on a measured acre. A hundredweight ought to give the average farmer a good start for the second year.

## TREATING THE SEED OATS.

There was quite a little said in The Farmer this spring in regard to treating oats, and we wonder how many who are troubled with smutty grain tried this remedy. We did and can say that we are very much pleased with the result. Last year we had twelve acres of oats. The writer doesn't believe that we are over-drawing the facts a particle when we say that we lost at least a hundred and fifty bushels on account of smut.

It was the worst field of oats that we ever raised, so far as smut was concerned, and perhaps as dirty as we ever saw. Before we got through harvesting we concluded that there would be a change the coming year. We took our seed from the same oats, treated them before sowing and this season the writer has not seen a single head having the slightest suspicion of smut, and we have looked carefully. Like the great majority in this vicinity, our oats are short and rusty; but not smutty.

Just as we finished treating our seed oats last spring, it began to rain and kept almost steady at it for three days. We spread the grain out on the floor as much as possible and kept stirring them; but the oats were wet and the air so damp that they began to sprout in spite of our best endeavors. We stirred plaster into them and this aided very materially in taking up the moisture.

Before we were able to sow them almost every oat had a sprout on from a half to an inch in length. Drilling was entirely out of the question, so we sowed them broadcast and worked them in with a floating spring tooth harrow, following after with a light drag. The crop came up quickly and in excellent shape, and had they not been put in late, would probably have been one of the best fields we ever raised.

Shlawassee Co., Mich. C. P. REYNOLDS.

(Hardly a farmer in the country but is sometimes forced (?) to plow ground in the spring when he knows it is too wet. On that account some prefer fall plowing for oats and corn. We know some of our own heavy clay soil has been five or six years trying to recover from a job of wet plowing in early spring.)

We have inquiries nearly every week asking for description of our pole drag. As we have given full description, with sketch, within the past few months, having also published the same each season for three years, we must refer inquirers to back numbers of The Farmer.

Having used one or more of these pole drags for some 15 years, we fully agree with friend Reynolds regarding its practical utility and value on freshly plowed ground, especially during this time of year.—Ed.)

## IMPROVING LOW LAND.

I have several acres of low land along a creek, which furnishes a small amount of pasture of poor quality.

What can I do with it to make it produce something more profitable? It overflows every spring, and is liable to at any time after a heavy rain.

In ordinary seasons it is dry enough to plow by June 1st, but in such wet seasons as last season and this one so far, it does not dry out.

H. M. WELLS.

## WHO CAN TELL HIM?

To the Editor of The Michigan Farmer.

Gentlemen:—Some twenty years ago I set a tamarack post and the same is about as sound as the day it was put in the ground. Now, I would like to know just what time in the year to cut these posts to have them last as the one spoken of. I have set others since and they do not last more than three or four years.

Oakland Co., Mich.

H. W. HOLMES.

## The Fairy Isle of Mackinac.

To reach this beautiful resort take the Michigan Central Excursion Aug. 23rd to Mackinaw City \$5 for round trip. Ten day limit, including date of sale.



## Live Stock.

### THE SHORTHORN FOR MICHIGAN.

The demand for young Shorthorn bulls the past season has been so strong that it must result in more attention being given to this breed by the farmers of the State. Time was when Michigan could count her herds of Shorthorns by the score, when nearly every cow in the pasture and steer in the feed lot or shambles showed the improving influence of this greatest of breeds. The over-stocking of the ranges, causing a great slump in the prices of beef cattle, of course affected the value of beef breeds, and the Shorthorn, Hereford, Galloway and Polled Angus became unpopular, and were largely supplanted on the farms of the State by the Jersey and Holstein as the result of the development of dairying. This latter interest has grown so rapidly that it in turn threatens to become unremunerative, except to those who understand it thoroughly and turn out a high-class product. Meanwhile the class of beef cattle has suffered great deterioration, the grade cows being crossed with bulls of the dairy breeds, the females retained for the dairy, and the males sold for what they would bring as calves, and this practically put an end to the business of raising good beef cattle. As a matter of fact, Michigan has fewer good beef cattle on her farms to-day than 40 years ago, when her population was not over one-third of what it is now. Naturally such conditions finally produce a reaction, and the present inquiry for young bulls of the beef breeds is the sure precursor of a return, on the part of many of our farmers, to raising beef instead of dairying. It also means that the owners of thoroughbred cattle will soon see their business occupying a better position than for the past eight or ten years. This does not necessarily mean that dairying is to be neglected in this State. On the contrary we believe it is a good omen for the dairyman, and means less severe competition and therefore better values for his products. A great many farmers were carried into dairying because the current was running in that direction, and they have not found it either congenial or remunerative. They were accustomed to feeding stock for the block, not milking cows twice a day. They are not a success as dairymen, but they were successful as feeders. Naturally they will gravitate back into their old line of business, and feel more contented than at present.

In changing from dairy cows to beef cattle, we would suggest that it would be just as well to select cattle which, while good feeders, are also fair dairy cattle. This is the policy pursued by most British farmers, and the one that enabled them to withstand so well the intense foreign competition they have been subjected to in the past 20 years. It is this ability to be useful in two directions that gave the Shorthorn its ascendancy in Great Britain, and finally in the United States and the Canadian Provinces. While the dairy qualities of the Shorthorn have been more or less neglected in this country, they exist all the same, and can be developed whenever desired. A good dairy animal and a first-class feeder combined in one, is certainly a good reliance for the average farmer, and that this can be secured in the Shorthorn will hardly be disputed. The Shorthorn will not make butter equal to the Jersey or Guernsey, or give as much milk as the Holstein. No one will expect this; but they will give as much milk as any other breed than the Holstein, and the butter product will be above the average, while her progeny will return as good a percentage of gain for the food consumed as any other breed.

We this week give an illustration of one of these general purpose cows, owned in England, where she has repeatedly been a prize winner in contests of the beef breeds, and made a high record as a dairy cow. She is a good type of the useful farmer's cow, one that could be placed on many farms in this State to advantage. She is a good example to keep in mind when you go to select a Shorthorn, for a close examination will show how little fault can be found with her in any particular. It is true she is a roan, but we hope that the old color craze, to which so many good Shorthorns

were sacrificed in years gone by, has been buried deep enough to prevent any chance of resurrection.

### PASTURING HOGS ON RAPE.

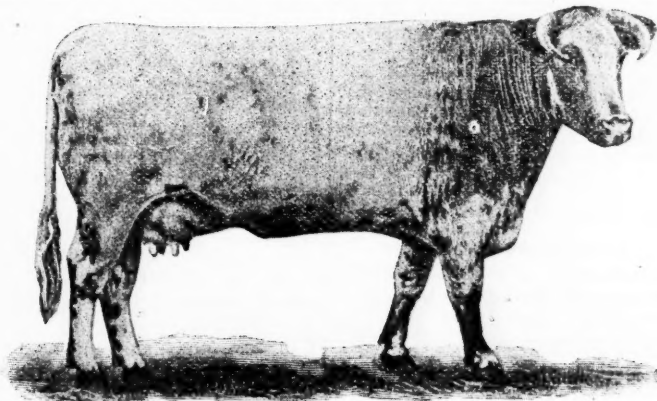
The gradual increase in the amount of rape grown in this State, principally by those interested in raising mutton sheep, has done much to awaken farmers to a knowledge of its value as a forage crop. It is relished by sheep, cattle and hogs, and the enormous yield of feed which can be secured from it at a time when pastures are likely to be bare, will enable farmers to carry through their live stock in fine condition and at light cost. This is especially so with the mutton breeds of sheep, which suffered more from the bare pastures and intense heat in July and August than from the snows and cold of January and February. Heretofore no one has thought of pasturing their hogs on rape, but it appears from a recent bulletin of the Wisconsin Experiment station that this can be done with excellent results to the hogs and therefore to the income of their owners. The bulletin says: At various times we have tried feeding hogs on rape and it has always been satisfactory, though it would sometimes be necessary to restrict the other feed that the hogs were receiving until they became acquainted with the taste of the plant. We have made two experiments, including in all fifty-eight hogs, with the definite object of determining the feeding value of rape. In both these experiments one lot of hogs were penned and fed soaked corn and also

and dusty, swine are most liable to have fevers, cholera and other derangements, and there is no doubt but that pasturing them on such a succulent crop as rape would add to their thrift and vigor, and thereby lessen the losses that occur in these months. Rape seems specially valuable for swine feeding during the hot summer months, because of its succulence and the relish of swine for it, and for these reasons we would urge our swine breeders and feeders to try it on a small scale for this purpose.

### IMPORTING ANTHRAX GERMS.

A report from Du Bois, Pa., last week, says that one of the most remarkable epidemics of diseases ever known in that state is being investigated by the State Board of Health. This epidemic has compelled the shutting down of the tannery at Falls Creek, two miles from Du Bois. Four of the employees at the tannery, who have handled hides from China, have died of this strange malady within the last few days, and several others are reported to be critically ill, while a score or more of cattle have died, evidently of the same disease.

Some time ago the tannery company received the first invoice of 100,000 hides, imported from China. The hides were started through the process of tanning and the liquors drained into the creek. Not long afterwards several head of cattle, running at large, and drinking from this creek died, and to this date a score have gone to the bonfire. It was clearly established that all the sick and dead cattle had drunk water from the contaminated stream.



A PRIZE-WINNING SHORTHORN COW.

shorts in a sloop. The grain was fed in the proportion of two parts corn and one part shorts by weight. The other lot had in addition to this grain a limited piece of rape. The hogs were fed so as to secure a satisfactory gain in both instances, but the amount of grain fed to those on rape was less than that given to the penned hogs that they might eat the rape more freely and make as nearly as possible the same gain as the others. In the first trial the ten hogs on rape ate in 76 days 1,386 pounds of corn, 690 pounds of shorts, .32 of an acre of rape and gained 853 pounds. The other lot penned ate 2,096 pounds of corn, 1,042 pounds of shorts and gained 857 pounds. The gain is practically the same, so that we were enabled to say that the .32 of an acre of rape saved 1,062 pounds of grain, or that an acre would be worth 3,318 pounds of grain. In another trial with two lots of 19 in each, conducted in the same manner and fed the same rations for seven weeks, the rape lot ate 2,220.3 pounds of corn, 1,109 pounds shorts, .6 of an acre of rape and gained 1,066 pounds. The penned lot ate 3,106.5 pounds of corn, 1,553 pounds of shorts, and gained 1,016 pounds. The gain is practically the same in this instance also, so that it may be said that the 6-10 of an acre of rape saved 886.2 pounds of corn and 444 pounds of shorts, or that one acre of rape is worth 2,217 pounds of grain. The average of the two trials indicates that an acre of rape is worth 2,767 pounds of such grain as we fed for fattening hogs.

The two trials that have been made at our station indicate that this crop is likely to prove as valuable for swine feeding as it is for sheep. There is less risk in feeding it to swine, as they do not bloat on it nor scour if fed properly. It gives every promise of proving an excellent crop for pasturing brood sows and young pigs. It is very evident that for late summer or early fall pasturing it is especially valuable. At that season of the year, when it is hot

When, therefore, some of the tannery employees were also subsequently taken sick, with symptoms resembling those that carried off the cattle, there was great alarm at Falls Creek. This feeling of apprehension was intensified when four of the tanners died. Investigation revealed the fact that the hides were infected with anthrax bacteria. Only one man who has been afflicted has recovered.

Anthrax is a malady most deadly in its effects upon man or beast, and when human beings are attacked by it they know that unless they can overcome its virulent germs in from five to eight days they must die. The disease is quite prevalent in South Africa, and in some portions of Europe, especially Russia and Hungary. It attacks sheep as well as cattle, and frequently wool handlers contract the disease from foreign wools. It is a very contagious disease, the dead carcasses, or any part of them being liable to spread it either among animals or human beings. An animal attacked very seldom recovers. Affected animals should be killed, their carcasses burned, and healthy ones prevented from occupying the same buildings or pasturing in the fields occupied by those suffering from the disease.

### STOCK NOTES.

Last week a prime lot native steers, raised in Iowa, sold in Chicago at \$5.25. They averaged 1,451 lbs. and were a very smooth, nicely finished lot.

We have received from Secretary Pickrell Volume 41 of the American Shorthorn Herd-Book. It is a book of 958 pages, and carries the number of bulls up to 125,262. The revival of interest in Shorthorns will make this volume more sought after by outsiders than for some years. The price of the volume is \$3, but it is free to stockholders.

That big bunch of black cattle, raised in Texas and branded, attracted big attention to-day, and to show how values advanced they started at \$4.85 and

finally sold at \$5. They were fed by Dave Rankin, of Missouri, and averaged 1,346; the brand is the XIT outfit; another lot, carrying the same brand, but lighter, sold at \$4.85; averaged 1,188. There was a big display of branded cattle to-day.—Chicago Journal.

Clay, Robinson & Co., in commenting on the arrivals and condition of the northern range cattle now coming to market, say such have been very disappointing. They are exceedingly soft for so late in the season and buyers are critical on that account. Texas and territory grassers are coming unusually good for this year, and it means no end of competition for the rangers, unless they are fat and good. Ranchmen do not often have this condition of affairs to meet, but the marked improvement in southern cattle and the reverse as regards northwesterns have brought it about.

We ask attention to the advertisement in another column of the first public sale of the Concord Shropshire Sheep Breeders' Association, which is to be held at Concord, Jackson Co., on Wednesday, October 13th. It is the intention of the association to make this the first of a series of sales to be held annually at this point, now the leading center for this breed of sheep in Michigan. Mr. L. S. Dunham, whom all interested in Shropshires in the United States know as an enterprising breeder and importer, and thoroughly reliable, is secretary of the association, and the other members are substantial farmers who have been successfully breeding Shropshires for years. We shall give further particulars of the sale in a future issue.

Says a writer in the London Live Stock Journal: "If one were called upon to sum up concisely the results of the sheep-breeding industry of the past sixty years, probably the first thing to say would be that there had been a general 'leveling up' of the character of the national flocks. Whether there are actually more sheep in the country may be uncertain, but there are certainly vastly more good sheep—a very large proportion of those which were in existence in 1837 being, as we know from contemporary records, of the most indifferent description. The next generalization which would occur to one is that short-wooled sheep have taken the foremost place, and ousted, to a large extent, the long-wools. Thirdly, there is now greatly more attention given to the production of mutton, and by consequence to the cultivation of habits of early maturity. Fourthly, the growth of certain improved breeds, and the attention now generally given to the pure breeding of sheep, and to the record of their pedigrees, has been a marked feature of the Queen's reign. It is curious to reflect that several of the breeds of sheep which are now most popular have been entirely developed—one might almost say constructed—within the Victorian era. The Shropshires are a notable case in point, and other instances which might be mentioned are the Hampshire Downs, the Oxford Downs, the Suffolks, and the Devon Long-wools."

WHEN writing to advertisers please mention that you saw their advertisement in the MICHIGAN FARMER.

### WEAK AND NERVOUS

"I was very weak and nervous and much run down in health. After taking a few bottles of Hood's Sarsaparilla I am quite strong." Mrs. ELLA DOLPH, 495 Spring Mill St., Mansfield, Ohio. Remember

### Hood's Sarsaparilla

Is the best—in fact the One True Blood Purifier.

Hood's Pills cure all Liver Ills. 25 cents.

## Shropshires AT AUCTION.

The Concord Shropshire Sheep Breeders' Association will hold its first annual sale at CONCORD, MICH.,

OCT. 13th, 1897.

The following Stock will be offered:  
**200 IMPORTED, CANADIAN and AMERICAN BRED EWES,**

All Bred to Reserve Rams.

Also some choice rams and ram lambs for sale. Importation will arrive about Sept. 1st. Pedigreed catalogue after Oct. 1st. Will also have

**5,000 GRADE SHROPSHIRE EWES.**

Some choice rams and ewes at private sale now.

Address L. S. DUNHAM, Sec., Concord, Mich.



## The Horse.

### UNJUST CRITICISM.

The Detroit meeting did not open with a boom, nor does it hold out promise of developing into anything wonderful. D. J. Campau is not the man to run a race meeting. He is too parsimonious. He conducts his show after the style and fashion of a Clark street clothing store. It was hoped that his experience last year had taught him to be more generous, but there he is again with his picaunish policy, charging admission to owners who have to stable outside of the track and assessing them if they rub any paint off the fence; refusing badges to persons who have the entree to every other race track in the country and pinching off a dollar everywhere he can. Last year he hired E. C. Hopper of the Latonia Jockey Club to act as racing secretary at a stated salary, as there was nobody on his trotting horse staff that knew the least thing about the work, and when he came to settle up he tried to "cut it in two with him."

The impression that he had seen the error of his ways and had concluded to adopt a more liberal system in the conduct of his meeting, is responsible for the presence of 600 head of horses at the present meeting, but it seems he is running the same old shake down.—Chicago Record.

The above criticism we believe to be very unjust to Mr. Campau. Of his personal characteristics we have nothing to say, except that as a native of this city he has always been recognized as an honorable and enterprising man, whose standing with business men is sufficient answer to the criticisms of the class with whom he is fortunate to be at "outs."

But we wish to call attention to what Mr. Campau has done for the racing interests of Detroit and the State of Michigan. For 30 years there was hardly a race-meeting held here which could be called respectable, either in the class of horses represented, the manner in which the contests were conducted, or the character of the greater part of those who attended them. We believe all will admit these statements to be in accordance with facts. During these years Michigan breeders were deeply interested in the development of the trotting horse, and yet conditions were such that most of them refused to take part in these meetings. As one old breeder said to the writer, "We dare not start our horses, for if it is necessary to kill a horse to win the money there are plenty who would kill your horse." That man knew, for he had an opportunity of learning in a very practical way, the methods then in vogue.

This was the condition of affairs when Mr. Campau, quite a young man, but greatly interested in the trotting horse, took hold of matters. He organized an association, secured the backing of some of the best business men in the city, and inaugurated the Blue Ribbon meetings, which have been conducted in a manner to place them at the head of the race meetings of the country. It is true the tin-horn gambler, the tout, and the disreputable rabble which follow the horses around the circuit, have been antagonized, and that from their point of view Mr. Campau is devoid of either heart or business ability. That is one of the reasons we respect Mr. Campau. We admire him for the enemies he has made, as a certain picturesque westerner said of a candidate for the presidency. During the years of depression in the horse business the Detroit meetings have been a bright spot in the gloomy prospects, where the breeder and the owner could enter his horses with every assurance of fair treatment, and that whatever his horse earned would be promptly paid. The success of the Detroit meetings, conducted on sound business principles, have had a distinct and beneficial influence upon race meetings in this State, and, in fact, all over the country.

Mr. Campau and his business associates are now trying to give the thoroughbred interest a much needed boost in Michigan. The meetings so far held have been far in advance of any ever before held here, both in the class of horses which have taken part in the contests, and the character of those who have patronized them. True, there are those who criticize the management of these meetings, but they are the men who would never give a week's time or put up a dollar to help any enterprise. They prefer sitting on the fence and criticizing those who do. We sincerely hope that Mr. Campau and his associates, who are doing so much to encourage the horse-breeding interests of the State, will meet with entire success in their efforts to give the public high-class and honorably conducted meetings.

### MOVING IN THE RIGHT DIRECTION.

A dispatch from Washington announces that Secretary Wilson, of the Department of Agriculture, will spend his vacation this month in traveling through Colorado, Utah, Wyoming, the Dakotas, and Montana, with the object of studying the resources of these States for rearing horses suitable for the European armies. The Secretary has written to United States ministers and has requested some Americans traveling abroad to give him information regarding the exact qualifications demanded for the army horses in Europe, and when this information is received a farmers' bulletin will be issued with a view to having this country do more in supplying the demand than it has in the past. This is the direction in which American horsebreeders can move with the assurance that, if they produce the class of horses required, the demand for them will be practically unlimited. The enormous standing armies of Europe require many thousands of horses annually as remounts for their cavalry, to draw their field artillery, and mount their staff officers and couriers. If the United States can meet this demand there will be good profits and a regular business for many years to come. We hope the Secretary, in his investigations, will not allow his judgment to be influenced by importers of the various classes of foreign sires who insist that their particular breed is the one to be relied upon for the production of the army horse. These breeds are more or less mongrels, getting their best qualities from the thoroughbred. There is no use depending upon them when the thoroughbred, of American breeding, can be secured at less cost. Better go to the fountainhead at once, and not lose time experimenting with the diluted strains of mongrels, whose only claim for consideration is the fact that they have more or less of the blood of the thoroughbred.

### THE HOOF OF THE HORSE.

At the last annual meeting of the Ohio Draft and Coach Horse Breeders' Association, Dr. D. S. White, dean of the veterinary college, Ohio State University, read an excellent paper on the above subject, of which the following is a brief summary:

The hoof is separable into three distinct parts. First the wall, which is that portion forming the front and sides of the shell. Second, the continuation of the former reflected inwardly at the heel and extending forward in converging lines as two strengthening bars of bone, and known as the "bars." Third, the sole, which is the floor of the hoof, occupying the space between the wall and bars.

The hoof-horn is secreted by the continuation of the skin of the body which extends beneath the hoof and covers the tendons, bones and ligaments, like the sock on the human foot. Horn is simply modified hair. Though to the casual observer the hoof may appear a simple piece of anatomy, we find it to be one of the most complex and beautifully arranged apparatuses of the whole body.

About 90 per cent of the cases of lameness in the horse find their seat in the hoof, and as nearly one-half our horses become lame after five years of age, it is seen that the care of the hoof is second in importance only to proper feeding and stabling.

The care of the hoof should begin with the foal. In case of irregular wearing away of the hoofs, they should be rasped into proper shape. With colts kept in the stable the wall-horn becomes too long (high) and the layers separate, resulting in the "hollow wall." The wall near the heel becomes bent under the sole, producing "hoof-bound." The timely and intelligent use of the hoof-knife is the remedy. The outer edges of the hoof should be rounded off carefully to prevent splitting of the horn. In paring the hoof we must have regard for the natural form and position of the foot. In very young animals irregularly shaped legs can be improved by judicious paring. Shoeing colts too young interferes greatly with the growth of the hoof.

The shod hoof of the adult horse needs even more care than that of the barefooted colt. Shoeing at best is an evil, but it must be resorted to. The shoe should be removed every

four or six weeks and the hoof shortened. The popular demand for "plenty of foot (hoof) under the horse" is a grave error. There may be arguments in favor of allowing the hoof to grow to abnormal length to gain in length of stride, but such a procedure must in time lead to disease of the foot, i. e., the tendons and joints.

Moisture is very essential for the proper development of the hoof. Smearing the hoof with fat is beneficial. It requires no specific formulas or patent ointment. Pure lard suffices. Glycerine should never be applied, as it dries it. Salves should never be put on a dirty hoof. Wash first. No ointment can directly stimulate the growth of the hoof, though some may contend to the contrary. In very wet weather add a little turpentine or wax to the lard. This prevents the hoof from becoming too soft. Use very little oil and apply with a cloth to the upper part of the hoof, to the sole and frog.

### HORSE GOSSIP.

A Chicago dealer thus summarizes conditions in that market the past week: The local and domestic trade is rather quiet; fewer buyers here for the past day or two than at the opening on Monday. A revival of eastern industries is needed to start up the home trade. The foreign inquiry is unusually active for a summer trade, and the export movement continues larger than any former year. The foreign movement is seriously hampered by the scarcity of receipts of export quality, and the bulk of the good to choice offerings are picked up at private sale, leaving the common and medium arrivals for the daily auctions.

The International Derby was run on Tuesday of last week, the opening day of the Detroit meeting. The starters were Ornament, with 125 lbs. up, Meadowthorpe 125 lbs., Moncreith 112 lbs., and Dare II. 112 lbs. The distance is a mile and a half. Ornament undoubtedly scared off some of the entries. He took the lead before the first furlong was reached, never was headed, and could have shortened the time several seconds if pushed. His jockey just sat still and let him win. Meadowthorpe had a sharp argument in the stretch with Moncreith for second place, and won out. The time for the mile and a half was 2:36; the record is 2:32, made by Lamplighter in 1892 with 109 lbs. up. It looked as if Ornament could have made it in 2:34 with his 125 lbs., as he was never pushed hard. He is undoubtedly a great horse.

They had quite a race-meeting at Fort Wayne, Ind., last week. In the 2:17 class, purse, \$1,200, the green young trotter Cresceus, by Robert McGregor-Mabel, was the winner after eight sensational heats; time, 2:11½. To crown his great feat Cresceus trotted the eighth heat back in the same notch as the seventh, stamping him as far and away the best 3-year-old that has yet appeared. The dam of this youthful giant is the same that produced the black mare Nightingale, who was a famous campaigner in her day. Pilot Boy, won in the 2:10 class; time, 2:10¼. He is by Pilot Medium, and was bred in Michigan. Elloree won

the \$2,000 purse in the 2:12 class. Elloree is by Axtell-Flora McGregor, by Robert McGregor. Derby Princess was the favorite and a lot of money was lost on her. In the 2:14 trot Oakland Baron proved the winner, defeating Dare Devil, Caid, Mosul, and others, the time being 2:10½, 2:10¼, 2:11¼. The 2:08 pace was a hot contest, in which Bumps proved the winner in straight heats, the field containing such good ones as Heir-at-Law, Frank Bogash, Badge, Directly and Jo He; time, 2:07½, 2:05¼, 2:04¾. They finished in the order named. Bumps hereafter will have to look for honors in the free-for-all.

When writing to advertisers please mention the Michigan Farmer.

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being a willing worker is most likely to suffer from sore back or shoulders. BICKMORE'S GALL CURE will cure him of saddle sores or collar or harness gall while he works. Guaranteed to do it. Equal good for sores in man. Ask your dealer for it. Sample will be mailed you for 10 cents. Bickmore Gall Cure Co. Box 704 Old Town, Me.

### CATTLE.

J. F. & E. W. ENGLISH, Clarksville, Mich., breeders of registered RED POLLED CATTLE. Olney and Sultan head the herd.

J. M. CHASE, Muir, Mich., breeder of Red J. Polled Cattle and Poland-China Hogs. 3 good yearling boars for sale, \$15 each.

JOHN LESTITER & SONS, Cole, Oakland Co., Mich., breeders of Scotch bred Shorthorns. Fine young bulls and heifers for sale. Also Shropshire sheep.

REGISTERED HOLSTEINS of both sexes and all ages for sale from my World's Fair prize-winning herd. 50 head to select from. Prices low. Terms easy. B. F. THOMPSON, Detroit, Mich.

### SHEEP.

HAMPSHIRE SHEEP FOR SALE.—A choice lot of all ages and both sexes. Prairie Castle Farm, J. H. TAFT, Mendon, St. Joe Co., Mich.

RAMS FOR SALE.—Choice Shropshires, good enough to head best flocks. Prices right. Write for special prices now. Choice Crimson Clover Seed, \$3.25 per bu. Sacks free. A. H. FOSTER, Allegan, Mich.

### Feeding Lambs Furnished

for fall delivery in numbers to suit. Choice registered Shropshires for sale. W. BINGHAM, Vernon, Mich.

SHROPSHIRE HALL STOCK FARM.—A grand lot of yearling rams from imported stock, good enough to head any flock. Also yearling and two-year-old ewes bred to choice rams; ewe and ram lambs; none better. L. S. Dunham, Concord, Mich.

ANCHORWOOD FARM, Flint, Mich.—Registered English, Canadian and Michigan bred Oxford Down sheep. Prize winning registered Jerseys. Registered Holsteins. Pure bred black Langshan chickens. A few Oxford Down ram lambs for sale, from imported sire and dam. Wanted a few registered Holstein calves. Address ANCHORWOOD FARM, Lock Box 1602, Flint, Mich.

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COUNTY LINE HERD OF POLAND-CHINA SWINE.—Pigs ready to ship. Write for catalogue. E. D. BISHOP, Woodbury, Mich.

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THE PLUM HILL HERD of Berkshire swine. Short-horn cattle, B. P. Rock and S. P. Hamburg fowls. Stock and eggs for sale. C. M. BRAY, St. Johns, Mich.

N. A. CLAPP, Wixom, Mich., BREEDER OF Large English Berkshire Swine. Write for prices.

WE can give you BARGAINS IN POLAND-CHINA PIGS and B. P. R., two grand yards. Eggs 15 for \$1. Write WILLARD PERRY or Hastings, M. H. BURTON, Mich.

Special Sale of Chester Whites at CARR VALLEY FARM. Lot of fall and spring pigs, dandies, at ½ their value. Write to-day and secure a bargain. W. W. BALCH, Deford, Mich.

I SOLD CURWIN KING for \$300 at 7 years. He now heads the oldest herd in Iowa. If you want TOP POLAND-CHINAS write WM. H. COOK, Waterford, Mich.

W. O. WILSON, Okemos, Mich., proprietor of the Michigan Central herd of IMPROVED CHESTER WHITES. I have a few head of '96 stock (both sexes) at reduced prices to make room for new comers. Choice LIGHT BRAHMAS. Eggs, 75 cents for 15; 25 for 15.

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SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce any scar or blemish. The safest best Blister ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses or Cattle.

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## The Poultry Yard.

For The Michigan Farmer.  
THE ADVANTAGE OF KNOWING HOW.

After your correspondent, Mr. C. L. Hogue, was here in June and told me how to care for young ducks, I found that it does pay to know how to care for poultry if you wish to make a success with it. He found me with ducks six weeks old, that would weigh maybe a pound, not more than a pound and a half at the most. As they were the first I had ever hatched, I knew nothing of how to care for them and had been feeding them raw meal and wheat screenings (as my husband is a miller). I found out from Mr. Hogue that by feeding cooked feed three times a day, and giving only what water they needed to drink (previously I had given a large panful for bathing purposes and thought of course ducks must have water to swim in) my ducks would do much better. The result is that I now have full grown ducks weighing 8 and 9 pounds apiece.

I wish other new beginners would learn how to care for their poultry properly, and then I know there would be more that would have better success with the same.

Eaton Co., Mich.

MRS. R. HORN.

### GEESSE IN RHODE ISLAND.

Few people in New England realize the importance of the geese raising industry in Rhode Island, says the New England Farmer. For a long time great quantities of geese have been raised in the southern part of the state, and their fame has almost, if not quite, equaled that of the Rhode Island turkey in the city markets of the East. Along the shores of Narragansett Bay and the Sound, about Tiverton and Little Compton, geese are more generally kept than in any other part of New England. In the region of Narragansett Pier, Point Judith, Westerly and Stonington geese are produced almost as extensively as about Little Compton.

In these sections dealers who buy up geese from near by producers, fatten great numbers, and with such success that geese from southern Rhode Island bring more in Boston and New York than those from any other part of the country.

Here geese raising having been followed for years, the raiser has such an understanding of the business that he knows just what to do and how to do it to make it profitable. The details are little understood by outsiders, and very little is known of the industry outside of the dealers and marketmen. It is therefore of general interest to know how Rhode Island gets to the front in this matter. It is well worth knowing what breeds are used and how they are bred, fed and prepared for market.

The old stagers have found that some breeds pay better than others, and that certain crosses grow faster and larger than pure breeds. Some cross certain breeds with the wild Canada gander and produce a hybrid, which is superior in flavor and brings a much better price. Success in the production of the wild geese and their crosses is not gained by every one, but only by those who understand their peculiar nature and humor them in their requirements.

The geese raising industry has been found of such importance that the state experiment station has taken up work with geese, has experimented with and compared different crosses, and has shown the results at the fairs, and is experimenting still more extensively in this line this season.

The results of last season's work were shown at the poultry show in this city last winter. As premiums were offered on geese other than pure bred, Rhode Island producers exhibited some of the geese, both alive and dressed, which have gained such fame in the New York markets.

At the show one could see the wild geese, the hybrids and other stock used in practical geese production. Not only could one inspect the stock in the show pen or hanging in the dressed poultry room, but he met some of these experienced geese raisers and heard them tell how they breed, manage and feed, as well as prepare their geese for market.

The influence of that show and of the free poultry institute held in connection therewith was of much value to the state.

### POULTRY IN SUMMER.

A healthy growing chicken is always ravenously hungry when it wakes up in the morning. Hence an early meal is just what the nature of the chickens demands, though the meal should not be so full as to prevent their desire for a foraging expedition immediately after. "Feed little and often" can not be too often reiterated. No plan is so wasteful and hurtful as to throw down heaps of food once or twice a day. The food should be scattered so that they can not gulp down whole mouthfuls at once. In this way they are made to suffer from over-filled crops and for relief they drink too much water and the inactivity which follows is often the cause of many disorders. If fed a little at a time they are more apt to take the exercise so essential to their health and thrift. The necessity of providing pure fresh water for poultry, young and old, is so obvious that a simple reminder is all that is here necessary. If milk is available it will be found highly beneficial if it is substituted for the water for morning and evening drink, though in our opinion it is better to give water during the hot hours of midday.

During the hot midsummer days poultry of all kinds are inclined to seek the shade whenever the sun shines. This is an evidence that shade in hot weather is as necessary as sunlight is in cold weather. If they have the run of the orchard, trees and vines will furnish shade in plenty but poultry yards are often seen not so favorably situated. By all means provide shade for the fowls and chicks and if no other means is at hand put up board sheds. It has been demonstrated over and over again that plum trees are the most profitable shade for poultry. The insect pests which so often ruin the plum crop are eagerly devoured by the fowls, resulting in much benefit to the fowls and fruit alike. In a similar way, to some extent, poultry are beneficial to fruit trees of all kinds.—J. O. Alleman.

### AMERICAN EGG STATISTICS.

An Eastern writer has been figuring up how much business American hens transact yearly in supplying the demand for eggs, and certainly the figures he gives are more than surprising. He says that in 1890 there were in this country 258,871,125 chickens and 26,738,315 other fowls. In that year the American hens laid 9,836,674,902 eggs. There are now 350,000,000 chickens, which will lay 13,750,000,000 eggs. These eggs are worth \$165,000,000, and the poultry meat sold during the year will bring \$125,000,000, which gives \$290,000,000 as a very low estimate of the earnings of Mrs. American Hen for one year of the great depression. The 350,000,000 hens are worth \$105,000,000 of any man's money, but we will not consider that, but take simply the earnings of the hen. The average length of an egg is two and a half inches. The 13,750,000,000 eggs will, therefore, make a chain 542,218 miles long, while the total weight of this production of hen fruit is at least \$53,125 tons.

Then he takes up other lines of production, and compares results with those achieved by the hen. Here are a few figures for comparison: Value of silver production, \$72,510,000; value of wool clip, \$38,146,459; value of all sheep, \$65,167,725; value of all swine, \$186,529,745; value of mules, \$103,204,457; value of horses, \$500,140,186; value of petroleum products, \$62,383,403; value of potato crop, \$78,984,901; value of tobacco crop, \$35,574,220; value of cotton crop, \$259,164,640; value of oat crop, \$163,655,068; value of wheat crop, \$237,938,908; imports of coffee one year, \$84,793,124; imports of tea one year, \$12,704,440; total of pensions, \$139,280,078; total of school expenditures, \$178,215,556; total interest on mortgages, \$76,728,077; cost of postoffice department, \$90,626,206; net earnings of railroads, \$323,196,454; dividends on railroad stocks, \$81,365,774.

The value of all gold produced in American mines in 1895 was \$46,610,000 and of silver \$72,051,000. The value of all minerals, including iron, gold and silver, taken out of American mines in 1894 was \$208,168,768. Americans are given to bragging about our immense mineral resources, and yet you will notice that the hens paid for it all in one year and had enough left to just about pay the interest on all mortgages.

The average cow weighs 130 times as much as the average hen, and yet all the milk cows in the country have a total value of \$263,995,545. Mrs. Hen in

one year will earn enough to buy every cow, and put the entire tobacco crop in her pocket as well. She could pay out of her year's earnings for all the tea and coffee imported in one year and all the petroleum products, and have enough left to buy all the tobacco grown in 1896. The total assessed valuation of the following states falls below the hen's yearly earnings:

New Hampshire, Vermont, Delaware, Arizona, West Virginia, North Carolina, South Carolina, Utah, Florida, Nevada, North Dakota, South Dakota, Nebraska, Alabama, Mississippi, Idaho, Louisiana, Arkansas, Montana, Oregon, Wyoming, Colorado, New Mexico.

In other words, Mrs. American Hen could buy any of these states from one year's egg and chicken money. She could buy in this way New Mexico, Arizona, Wyoming, North Dakota, Idaho and Montana all put together.

### IMPROVING POULTRY BREEDS.

At a meeting of farmers in Massachusetts Mr. Samuel Cushman, who has devoted a life time in the work of conducting experiments in poultry raising, in talking about improvement in the common farm poultry said that there was rapid improvement in the raising of poultry in the West. For a long time fanciers have thus been distributing pure bred poultry, and their superiority over common fowls in the production of marketable products is becoming appreciated. Western poultry has in the past brought low prices because it has been inferior to eastern raised stock, but this difference is growing less each year. Western producers are learning the lesson and are not slow to act; they are paying more attention to the fine details. Their product is improving very fast, and before long refrigerator cars will bring as fine poultry from the West as is now secured in New Jersey and the East. Yet many eastern farmers still put poultry on the market that is no better than the most inferior western stock. No wonder they are not satisfied with the price received and become disgusted with the business.

It surely pays best to raise the finest product. Visit the market where only the best of everything is sold and see for yourself what is demanded, what receives the top price and aim to excel it. Inspect the broilers, roasters, and old fowls and learn the preferred size, shape, and color of skin and legs. Is very yellow skin and leg demanded, or is white skin and white or dark legs given equal preference? Is stock in good order? Is softness and tenderness of flesh more prized than extraordinary flesh development? Do large white eggs bring the highest price or are those having thick brown shells preferred? Then select the breed which excel in those qualities or engraft it on to your stock by crossing or grading. Of course the importance of hardiness,

good feeding qualities, quick growth and early maturity or prolific qualities should not be lost sight of in making this selection.

Many attempts to improve a flock of fowls have resulted disastrously. Quite often a farmer having a flock of common stock that is well acclimated and free from disease, but not very profitable, disposes of them and secures pure bred fowls which he gives no better care. Having been improved and made more profitable partly by receiving excellent food and care, better than the farmer is accustomed to give, the improved fowls do not thrive. Possibly they are from high scoring fancy stock that has weakened by being over shown and in-bred. Under his management they may be no more profitable than his common stock, while they are more sensitive to exposure and susceptible to disease. He has about as much use for them as a man without a hothouse to put them in has for hothouse plants. This man may become prejudiced against pure bred fowls. Had he secured suitable farm reared pure bred birds from stock that had not been bred for exhibition points for several years, and at the same time had taken more pains to keep the hen house clean, free from lice, and to provide better food and enough of it, he would doubtless have secured a greater profit and have been gratified with results. Proper food has much to do with improving a breed, and improved characteristics cannot be retained unless sustained by it. Common scrubs endure privation and exposure best and it is not always wise to discard them. It may be difficult to secure really good birds for useful purposes.

Ordinarily the Leghorns are classed as non-setters and to a great extent they are. Generally we have one or two White Leghorns offer to set during the season, but so far this year we have not had any and probably will not have, as it is late. A few Brown Leghorns which we have prove an exception this season. Out of eight or nine hens from one to two years old, not less than five have become broody and two or three have successfully brought off chicks and are rearing them successfully.

Pallid faces indicate pale, thin blood. Rosy cheeks show the pure, rich blood resulting from taking Hood's Sarsaparilla.

When writing advertisers please mention that you saw their advertisement in the Michigan Farmer.

### Brown Leghorn Cockerels \$1 Each.

Crossed with Plymouth Rocks, the product is the ideal fowl for farmers. These birds are not bred to a feather for show purposes, but are full blood, good size, and remarkably healthy. Address NELLIE CROFOOT, Adrian, Mich.

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Our NEW OUTFIT will include 6 half-soles, which cost regularly from 45 to 60 cents, and pieces for patching. The awls, knife, thread, etc., will be the same as used by the best mechanics. The hammer is of polished steel, and everything to correspond, with full instructions how to do the work.

Anyone Can Do Their Own Mending and save money. Our price has always been \$2 (purchaser paying his own freight), and that was \$1 less than the same thing usually sold for, but by buying a large quantity and close figuring, we have been able to add about 75 cents' worth in extras and improved tools, and make the price

ONLY \$2.00, FREIGHT PAID to any point in Michigan, Ohio, Pennsylvania, Indiana, New York, Kentucky or West Virginia; 25 cents extra to more distant States.

The No. 1 outfit includes 1 adjustable Iron Stand for lasts; 1 Iron Last for men; 1 Iron Last for women; 1 Iron Last for boys; 1 Iron Last for children; 1 Shoe Hammer (polished steel); 1 Shoe Knife, maple handle, 3-inch (best make); 1 Peg Awl Haft, leather top; 1 Wrench for same; 1 Sewing Awl Haft; 1 Harness Awl Haft; 1 bottle Rubber Cement; 1 bunch Bristles; 1 ball Shoe Thread; 1 ball Shoe Wax; 1 package Cobbler's Wooden Pegs; 1 pair men's Heel Plates for soling; 1 package Clinch Nails for healing; 1 package cobbler's Heel Plates; 1 pair child's Heel Plates; 2 pieces Patching for Plates; 1 pair women's Heel Plates; 1 pair boys' Heel Plates; 1 pair men's Heel Plates; 1 box Copper Rivets and Burrs; 1 Rivet Set; 1 Harness and Belt Punch; 1 Soldering Iron; 1 bar Solder; 1 bottle Soldering Fluid; 1 box Rosin; 1 piece Tin for patching; 3 pairs Half Soles, heavy, medium and light. Directions for use. Packed in wooden box with hinged lid; weight 20 lbs.



We can also furnish a No. 2 Outfit—boots, shoes, and rubber repair—including the following: One adjustable Stand for lasts; 1 Iron Last for men; 1 Iron Last for women; 1 Iron Last for boys; 1 Iron Last for children; 1 Shoe Hammer, steel; 1 leather top; 1 Wrench for same; 1 Sewing Awl; 1 Pegging Awl; 1 Sewing Awl; 1 Shoe Hammer, steel; 1 Shoe Knife, maple handle, 3-inch (best make); 2 pieces Patching for men; 2 pieces Patching for women; 1 bottle Leather Cement; 1 package Clinch Nails for men; 1 package Clinch Nails for women; 1 ball Wax; 1 ball Thread; 2 pair Heel Plates for men; 2 pair Heel Plates for women; 1 bunch Bristles. Directions for use. Packed in wooden box with hinged lid. For 50 cents less than No. 1. FREIGHT PAID as specified above.

Every family should have one of these outfits. Address all orders to THE MICHIGAN FARMER, Detroit, Mich.

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CONDUCTED BY A. C. BIRD.

All correspondence for this department should be addressed to A. C. Bird, Highland, Mich.

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### THE FARMER'S LAWN.

(Abstract of paper read before Marion Farmers' Club, July 29, by Prof. W. M. Munson, University of Maine.)

No class of people have better opportunities for making the home pleasant and attractive at small cost, than the farmer,—yet, I am safe in saying, no class with the same intelligence and enterprise in other directions is so universally careless and negligent in this direction. The home environment of our young people during the first fifteen years of life exerts a more powerful influence on their future prospects than we at all times realize. But as we look at a large proportion of our rural homes can we wonder that the wife looks worn and tired and discouraged; and that the children become discontented with the dull routine of work, with the old farm house and its weedy front yard, its weedy garden—if there be a garden—its tumble-down fences, its treeless, shrubless, flowerless surroundings? Is it any wonder, I say, that the children become discontented and leave the farm at the earliest possible moment; or what is worse, lose their desire for attractive surroundings? What can be more sad than to see a young man or a young woman "settle down" without hope or ambition beyond securing the bare necessities of life!

One of the problems with which we are constantly met in the East is: How shall we keep the boys on the farm? I reply, "Give the boy a chance." Observe co-operation. Make the home attractive, not alone by kindly sympathy and interest, but by providing for the physical, mental and social welfare of the young people. As we grow older and colder from contact with the world we too frequently overlook the keen, though often unexpressed, desire of the young people for social enjoyment. More people are driven from the farm by its isolation, loneliness and lack of tasteful surroundings, than by any other cause. If the boys and girls go away to the academy for a time and get a taste of village or city life, the contrast when they return to the old farm is often too strong.

Now I admire the young man or the young woman with some ambition, some snap, some desire for better things and a higher form of life. At the same time I have only contempt for the man who says: "What's good enough for me is good enough for my boy." The most satisfactory results can not be expected if the boys are regarded in the light of domestic animals, costing so much to feed and clothe them and saving a certain amount in the labor account.

It is not for me at this time to speak of books and papers and the social aspects of home life on the farm, but I wish for a short time to talk about the external features of the farm home, of ways and methods, rather than of sentiment.

Many of the young people here will soon be starting in life for themselves. To such I would say, in building a new house consider well its location. Don't build where the old one was, simply because the barns are there,—though of course, other things being equal, the barns should be near the house.

Healthfulness is of the first importance,—so be sure that the location of the residence is such that perfect drainage—both soil and atmospheric—is secured. Other things being equal a southern or southeastern aspect is most desirable.

If possible, make use of natural groves or scattering trees and of shelterbelts or windbreaks, and place your buildings near them. Nothing you can plant will be so satisfactory as the native forest trees. If there is not a natural shelter of trees, by all means provide one.

A good lawn is the most essential element of beauty in any grounds and in these days of cheap lawn mowers there is no excuse for not having a

neat lawn in front of the humblest dwelling. It is very little more work to leave the surface of the ground smooth after the final grading about the buildings than it is to leave it rough and uneven. Arrange if possible to have a few inches of good loam on the surface when the grading is completed, and in any case, make a liberal application of well-rotted stable manure. After thorough preparation, and raking with a hand rake, seed very thickly—using three to five bushels of seed per acre. After the seed is sown, roll and if late in the season, or the soil is very dry, mulch with chaff or fine manure or leaf mould. Keep the grass closely clipped during the summer. In this way only can the weeds be kept down and a thick velvet turf formed. In the latter part of the season it is well to let the grass become longer for the double purpose of strengthening the roots and of serving as a mulch during the winter.

The best grasses for a lawn are Kentucky Blue Grass and Red Top with a slight admixture of White Clover on heavy soils. Rhode Island Bent is also a valuable grass for heavy clay soils. On the sandy loam soils of Maine, Kentucky Blue Grass alone will be found as satisfactory as anything.

As to the care of the lawn but little need be said. In spring it is well to rake off dead leaves and roll the ground, but I would not commend the practice of burning over the lawn. A lawn mower is necessary to insure good results, but a very good machine can be procured for \$5.00, and the labor of mowing in this way is very light.

### PLANTS FOR THE LAWN.

I am glad that in many places women are taking up the work of beautifying the external features of the home. In this work they have an opportunity to display quite as much taste as in the trimming of their gowns. Indeed in many cases the taste—or lack of taste—is more vividly portrayed in the gardens than in the gowns. I go to one place and the blaze of color is enough to blind one. Red reigns supreme! Geraniums, salvias and coleus vie with hollyhocks, phlox and poppies in the effort to dazzle the beholder, while possibly nasturtiums and zinnias endeavor to add color to the scene.

A neighbor may be of a sunny nature; in which case the yellows preponderate. Buttercups, marigolds and sunflowers hold sway. Perhaps to please an odd fancy, yellow sweet sultan holds a place in one corner and golden button timidly holds up its head in the background, while tiger lily and Hemerocallis proudly dispute the right to exclusiveness.

Possibly a third neighbor is inclined to have the "blues," and then we find asters and larkspurs, bachelor's buttons, day lilies, Irises and Tradescantia galore.

Now how much better the effect would be if these different colors could be united and toned down, not thrown together in crazy patchwork, but harmonized as woman is capable of harmonizing discordant elements. Although refining in their influence, flowers are still essentially aristocratic. The "400" will not readily mix with the coarser varieties; nor should I expect any one here to follow the example of the woman who loved flowers, but put them among the tomato plants to save trouble in watering.

I wish to make one suggestion with reference to the display of taste in arranging flowers. Although "fashion" may sanction the practice, do not torture your neighbors by arranging a display of pots and kettles, wash-tubs and churns, painted a glaring red, in solemn array before the house—as if to remind passers-by of the blood of the martyrs.

The selection of trees and shrubs for planting is always perplexing. A few general principles may aid in solving the problem:

1. Do not attempt too much. Grounds that are crowded, even though the plants of themselves may be choice, have the appearance of an overdrilled person.

2. Do not discard native plants because they are "common." The oaks, maples, hickories and elms; the viburnums, dogwoods, roses and sumacs, are unsurpassed in their respective classes. We might name further the hawthorn, the wild crab, the wild cherry and plum, the shad-bush, the tamarack, the white ash and many others of special value and easy to be obtained.

3. Do not invest freely in untried things. If you have enterprising and experienced neighbors, consult with

them before ordering nursery stock. Otherwise correspond with some reliable nursery firm or with some person in whose judgment you have confidence for advice in specific cases. It is usually safer to place an order directly with some reliable firm rather than with an agent. As a rule you will pay an agent 50 to 100 per cent more than the same goods would cost if purchased direct, and are less likely to receive them in good condition. It is often practicable for several neighbors to unite in sending an order and thus get wholesale rates. In making a selection of flowering trees and shrubs, aim to secure a succession of bloom, in order that the grounds may be attractive all summer. Among the earliest flowering hardy shrubs are Daphne Mezereum and the Forsythia, which bloom before putting forth leaves—usually about the first of May. Following these shrubs are the Magnolias, the Red Bud or Judas Tree and the Hawthorn the apple and the cherry among small trees.

Some of the best second early shrubs are the Azaleas, Bush Honeysuckle, Japan Quince, Double Flowering Plum, Flowering Almond, Lilacs in variety and the earlier Spiraeas—especially Spiraea Van Houttei, prunifolia and Thunbergii. A little later come the Weigelas and mock orange (Philadelphus) and the new Japanese Rosa rugosa.

In late summer we have the late spiraeas—as Bumolda, Billardi, Callosa, etc.—the "Smoke bush" (Rhus Cotinus), and, best of all for massing, the hardy Hydrangea.

The brightness produced by bulbs and hardy perennials will well repay a small outlay in this direction. In earliest spring we have the Christmas Rose (Helleborus niger), the Snowdrops (Galanthus) Crocuses and Pansies. A little later Tulips and Hyacinths appear and these are followed by Columbines, Lily-of-the-Valley, "Bleeding Heart" (Dicentra) and Peony. In summer and early fall the Japan Anemone, the Golden Columbine (Aquillegia Chrysantha) the Foxglove, Hollyhock, Plantain Lily (Funkia) and the numerous species and varieties of tree lilies are all very effective and are easy of culture.

### WHEN TO PLANT.

But for the difficulty in obtaining well matured stock in the fall, I should advocate setting most trees and shrubs in September and October. Because of this difficulty, however, spring planting is usually advisable. All planting should be done just as early in the spring as possible, that the trees or shrubs may become well established before the leaves are put forth.

Hardy herbaceous perennials such as phlox, dillitalis, hollyhock, columbine, etc., should, as a rule, be planted in September. The same is true of most bulbous plants, including the crocus, hyacinth, lilies, tulips, etc. The gladiolus is usually set in spring.

### ARRANGEMENT.

The effective arrangement of trees and shrubs is often a most difficult problem. One of the first things to accomplish is the screening of out-buildings and other unsightly objects. The best plants for this purpose are evergreens—especially those which appear best at a distance, as Norway Spruce, Austrian Pine or Arborvitae (white cedar). It is not necessary that the planting be done in formal belts or hedges. Irregular groups, so arranged that the view is obstructed, are better than formal hedges. A trellis covered with vines may often be made effective and attractive as a screen.

There may properly be a border of low growing shrubbery next to the house and it is well to plant a vine of some sort by the piazza. Nothing is better for this purpose than the common woodbine. Akebia, and Actinidia, two new Japanese climbers are also good, as is also the "Boston Ivy"—Ampelopsis Veitchii.

In general, a better effect is produced by planting in masses and borders, than by dotting the plants here and there over the lawn.

The "flower garden" should be a little at one side of the house rather than directly in front. Nothing adds more to the attractiveness of the place than a well kept lawn in front of the house.

The general appearance of the "home place," is frequently taken as an index of the habits and characteristics of its occupants. Neatness in and about the home inspires confidence in outsiders and a feeling of pride and satisfaction on the part of the young people; carelessness or slovenliness, inevitably has the opposite effect. I am aware that during the "hard times" and with farm work pressing, it is

easy to let the "little things" go, but let me ask, Does it pay?

### REPORTS FROM LOCAL CLUBS.

#### MARION FARMERS' CLUB.

The July meeting of the Marion Farmers' Club, which was held at the home of Mr. and Mrs. A. A. Stowe, July 29, proved to be one of the most interesting of the series. "The Farmer's Lawn," a paper read by Mr. W. M. Munson, of the University of Maine, was replete with good things. He handled the subject without gloves, but so agreeably that its effectiveness for good can safely be calculated upon. It was a most pleasing and scholarly address.

Hon. Jason E. Hammond, superintendent of public instruction, kindly consented to supply the place of A. C. Bird, of Highland, who was down on the program for a talk on college matters, but could not attend owing to official business. While Mr. Bird's absence was greatly regretted, Mr. Hammond, by his able and instructive remarks, held the close attention of his hearers. The thanks of the club are due him for adding so much to the pleasure of the meeting.

Chas. S. Beach, of the University of Wyoming, followed with a talk on "The Agricultural College of Wyoming." He gave a very clear idea of the methods of farming by irrigation, herding sheep, the character of the country, climate, etc., of the mountainous state.

Chas. Reed, of Marion, a student at our own Agricultural College, on request, gave an insight into the practical side of student life. All were favorably impressed with his remarks.

Among the visitors from abroad, who took no active part, were Mr. Bert Fairchild, of California, and Miss Nona Smith, of Tennessee.

The next meeting will be held at the home of Mr. and Mrs. H. G. Bucknell the last Thursday in August.

LIVINGSTON CO. REPORTER.  
SEVILLE AND SUMNER FARMERS' CLUB.

The Seville and Sumner Farmers' Club met at Crystal Lake August 5. There were in the neighborhood of seventy in the company and although a greater part of the drive to the lake was through a rainstorm, the day's outing appeared to be enjoyed by all.

There being no program prepared, the time was occupied with an excellent picnic dinner, boating, bathing, the discussion of general Farmers' Club work, and sufficient fun and foolishness to keep the company alive.

H. B. ANGELL, Cor. Sec.

#### WHITE LAKE FARMERS' CLUB.

The regular August meeting of the White Lake Farmers' Club was held at the home of Mr. and Mrs. Hiram Covel on August 7. After partaking of the usual club dinner, President W. E. Clark called the meeting to order.

The usual opening exercises were disposed of, when the Association question was taken up for discussion, being opened by Mr. R. Hubbard. He reviewed the preliminary work of the legislature in establishing the Agricultural College and gave a description of the College buildings, their equipments and surroundings.

The efficiency and work of the College was commended by most of the members who spoke on the subject, and the reason why the College is not more generally patronized by the public is because the farmers show so much coldness and opposition to the institution. The benefit which the farmers receive from the experimental department and the issuing of experimental bulletins to all who apply was well spoken of.

The second question on the program was then taken up, namely, "What Changes Should Be Made, if Any, in the Naturalization Laws of the United States?"

The first speaker held that inasmuch as a large proportion of the foreigners who emigrate to our country, and especially those who locate in our large cities in large numbers, are of an illiterate and criminal class, there should be greater restrictions or qualifications, making it necessary for anyone to be able to read and write the English language; also that a ten years' residence should be required of any foreigner, in order that he may become acquainted with our laws and customs before obtaining the elective franchise.

Another amendment suggested was that of prohibiting anyone from own-



ing real estate in the United States except citizens thereof. The object of this amendment would be to prevent foreign syndicates from obtaining control of such large estates and plants in this country. Woman's suffrage was also recommended, as they are more capable of using the elective franchise aright than a very large proportion of our foreign-born population.

The general opinion was that it was hard to draw the line and do justice to the better class and exclude from citizenship the undesirable.

Miss Jessie Clark, one of our members, who had spent the past winter in Tennessee, gave a short and interesting account of life in the sunny South. The well-to-do farmers in the South took life easier, worked less and were more contented with their surroundings and less ambitious about progressing than those in the North. She thought if they had some of our zeal and activity, and we some of their lack of it, it might be better for both classes.

It was decided to hold the next meeting of the club with Mr. and Mrs. James Neal in Springfield, Oakland Co.

REPORTER.

## HOLLY CENTER FARMERS' CLUB PICNIC.

The Holly Center Farmers' Club met for their annual picnic on the banks of Fagan Lake, Thursday, August 5. Nearly all the members of the club were present, besides a large number of visiting friends, who, if not members, are interested in the Farmers' Club movement, and took advantage of the occasion for a day's outing and rest. Ample provisions were made in the way of seats, music, boats, etc. The day was everything that could be desired, just cool enough for comfort, the rain having laid the dust and made it possible for many farmers to attend, who would otherwise have been busy in their oat harvest.

After partaking of a picnic dinner such as farmers' wives can only provide, the club was called to order by President Mitchell and opened by singing "America," in which all heartily joined. After listening to a very interesting program, consisting of music, readings, recitations, etc., in which some of our visiting friends assisted, the discussion of the question for the day was taken up, which was, "What is the Highest Duty We Owe to Our Country at the Present Time?"

In the absence of Rev. Mr. Buck, who was to have led in the discussion, the president called on Mr. Frank Downey, who thought that the highest duty was for each individual to perform the duties of good citizenship.

Mr. Rood followed in the discussion, showing that while there are many duties that we owe to our country, the highest duty, the one that is paramount to all others at the present time, is to help rid our country from the curse of intemperance.

Mrs. Gaylord agreed with Mr. Rood, but thought the only way to right this evil was to give the women a right to vote.

Mr. Wheeler was cheered by the ladies for the compliment paid to the mothers, showing in his remarks that to their careful training and influence we owe all good citizenship. It was thought best to finish the discussion at the next club meeting, which will be held at E. E. Wheeler's, July 2.

Oakland Co.

REPORTER.

## FULTON CENTER FARMERS' CLUB.

The Fulton Center Farmers' Club held their August meeting at the home of Mr. Abel Skinner on August 3. After the usual opening program had been carried out, a paper was read on "How to Better the Condition of the Farmer." This drew out a good discussion, but no definite conclusion was reached.

A paper by our secretary on "Fitting Ground for Winter Wheat" followed. It was thought by most members that we could not do too much work on the surface of the ground by rolling and dragging, to pack the subsoil and pulverize the top. The majority favored early sowing, advocating from the 1st to the 10th of September as the proper date.

The next question, "How to Get Rid of Prickly Lettuce," was then taken up. It was thought by the members present that the law should be enforced compelling farmers to take care of the foul weeds on their farms.

The question, "What is the Best Kind of Grass for an Orchard," was then taken up. Some thought alsike clover and some timothy.

The general question, "In What

way do the Combines Affect the Farmer?" was opened by Mr. N. Walker and discussed by all the members. It seemed to be the general opinion that all trusts and combines were hurtful to the farmers.

A resolution of respect and sympathy was passed on the death of Mrs. Chas. Dodge, a member of this club.

We then adjourned, to meet at the home of William Laycock on the first Thursday in September. All visitors are invited.

JOSEPH FOSTER, Reporter.

Gratiot Co.

## WIXOM FARMERS' CLUB.

The August meeting was held at the home of Mrs. Thomas Silchist. The rain so timed itself as to force nearly all of the club members to eat their dinner at home. But nevertheless they all got there just the same and were in a good mood for work. An excellent program was carried out, including two papers.

The first, by Mary Green, dealt with the education of women. She showed that education enriches life as well as broadening its sphere. She touched upon the "new woman," calling attention to the fact that though ridiculed in the papers by the caricaturists, yet she is nowhere pictured as being Jr., was on education, with a view to

The other paper, by T. C. Severance, weakly.

ward discussing the Association question on "The Agricultural College." He stated that it is held by some that success in life in farming is counted only in dollars and cents. Thus the man who ruined a good farm in order to build up a bank account is called a good farmer, while the man who was placed on a run-down farm and by the exercise of intelligence and the knowledge of agriculture brought it to a high state of cultivation is accounted a failure, because instead of accumulating a bank account he is forced to return his profits to the regaining of the fertility of the soil. He said we will grant the claim that education is unnecessary to the squeezing of the hard-earned dollars from the soil, but there are yet all kinds of men, from the cannibals who eat their fellows to George Stevenson, Gladstone, Lincoln and Garfield, the highest type of civilization. You may take a hog and deck him out in ornaments of gold and feed him from a golden trough, and yet he will be a hog still. But man is different. A cannibal can be educated into being a highly respected citizen. Education is the uplifting of men.

The Association question was then opened by Howard Severance, who stated the purpose of the College and the necessity of education along agricultural lines. He showed how the knowledge of a farmer must be scattered, the collection and classifying of which is but making the science of agriculture. He explained the advantages of the school for the little expense entailed in attending it.

Mr. Emmet Green expressed his satisfaction with the College.

Mr. Jerome Crompton stated that if we sent all our boys and girls to the College our crops would be apt to suffer. It is all right for those intended for the higher professions, but we do not need to go to College to learn how to turn over hay, to plow, or when to top out a wheat stack to miss the rain. For that reason he deemed the College a needless expense.

This started the discussion and several followed.

Mr. Bell, who had before declined to speak through ignorance of the work of the College, now said he was always ready to talk in the interest of education. He told an apt story of a man who opposed the building of a new schoolhouse, because he thought it was not needed, for, although his boys did not know A from Z, yet they could strike a furrow as straight as anyone. In speaking of the pleasure of education he said he could not see how anyone could enjoy himself who had neither books nor papers. How profitless must be their evenings. The man lies asleep till bedtime, while his wife is, perchance, patching his pants. The children, some asleep, some perhaps jangling over an apple or something, are no better off. How much different the spirit of education with its books and papers.

Oakland Co.

HOWARD SEVERANCE, Cor. Sec.

## NORTH VERNON FARMERS' CLUB.

The regular monthly meeting of the North Vernon Farmers' Club was held at the home of Mr. and Mrs. Albert Vincent on August 4. This was a

very interesting meeting. A large attendance was present and a fine program rendered, consisting of music, select reading and recitations.

Floyd Owen read a paper, entitled, "Farms and Farmers." He said he had read recently this headline in one of our agricultural papers: "Improve the Farmer, Not the Farm." He believed the greatest need of the times was to improve the farm. He cited the deterioration of the soil and the run-down and wretched condition of so many farms. While he recognized the necessity of a high degree of intelligence in the farmer, he did not think they needed to be preachers or politicians.

The question for discussion by the Club, "What are the Greatest Enemies to the Farmer's Success?" was led by F. E. Patchel. He believes that insect pests had much to do with his non-success; but the greatest enemy of all were the trusts and combines which fixed the price of both what he bought and sold.

The question box produced the following questions: "Should Bicycles Be Taxed?" which was given to Albert Conrad. He said he was a bicycle rider and did not think they should until there was a track built for them to run on. S. C. Patchel thought they should. His reasons for this opinion were that the law gives them one-half of the road and very many riders were prompt to demand their rights, but slow to give the drivers of vehicles theirs. (But this cannot be said of Mr. Conrad. He is a gentleman with his wheel.) "What is the Best Wheat for Low Ground?" L. J. Smedley thought that the Connecticut White and Saulzer's Red Cross were good varieties.

"Does the Board of Trade Control the Prices of Farm Products?" drew out quite a lengthy discussion. While it was the general opinion that it did, there was a difference of opinion as to whether the farmers were losers in the long run by its existence.

After partaking of an excellent supper the club adjourned, to meet with Mr. and Mrs. Sessions on the first Wednesday in September.

PETER PATCHEL, Cor. Sec.

## Veterinary Department.

CONDUCTED BY DR. W. C. FAIR.

Advice through this department is free to our subscribers. Each communication should state history and symptoms of the case fully; also name and address of the writer. The initials will only be given. When an answer is requested by mail it becomes private practice, and a fee of one dollar must accompany the letter.

Turkeys Have Sore Throats.—Tell me what to do for my turkeys? When about three or four weeks old they commence to grow dumplish and die. Are drowsy and soon begin to stagger and go towards the drinking water. A nasty discharge comes from their mouths. They die at the end of three or four days. G. T., Coldwater, Mich.—Give them one-quarter grain of quinine and five drops of tincture iron in one-half ounce of water twice a day.

Heifer Gave Milk Too Soon.—Young heifer due to calve November next has come to her milk by another cow's calf sucking her. Would it be safe to dry heifer before she calves. Have heard it said that if I dry her she will never come to her milk again. R. H. O., Concord, Mich.—You had better dry her up. It is all nonsense about her not coming to her milk a second time. It may be necessary for you to milk her occasionally now before she will dry up if she is running on good pasture and is naturally a deep milker.

Calf Does Not Drink Well.—Four-week-old calf has never drunk well since being weaned from the cow. Calf was weaned when three days old. He has been fed on skimmed milk. It will go a day or two without drinking, and at no time seems to relish milk. Have noticed lately that it runs very slightly at nose. R. G. F., Owosso, Mich.—When you feed calf, hold milk up to level with body. In that way calf will swallow milk better. Try to induce him to eat slop. A little well cooked oatmeal or cornmeal or second fine would be a good diet for him.

Surfeit—Farcy Buds.—Gelding is seven years old, sound and in good health, except for one thing. He has small spots where there is no hair on his neck. These places have a small red spot in the center of them that discharges a lightish fluid that dries and forms a scab. There is at first a small hard lump. Very soon the hair comes

off and then follows the discharge. Spots seem to itch. Have been washing spots in carbolic acid water. Horse has not been overheated that I know of. F. G. C., Church, Mich.—Give one dram iodide of iron three times a day and apply tincture of iodine once every three days. If sores do not heal, touch them with a little nitrate of silver once every two days.

Sore Throat.—Cow eight years old was taken sick about the first of July. Symptoms were great weakness and discharge from nostrils of a greenish color. She also had a cough. I called a veterinarian. His diagnosis was sore throat. She got better but was not right until a few days ago. Our attention was called to her bellowing as if she were hurt and then running across the field. A few hours later she was seen to stagger and whirl around several times and fall. Since then she has been partially blind, but otherwise seems better. She has been giving milk about two months. D. L. D., Richland.—Her blindness is caused by a paralysis of the optic nerve, causing loss of vision. Keep her bowels acting freely by giving her Epsom salts. Feed her less. Gargle her throat with one ounce chloride of potash to two quarts of water. She will possibly never regain her sight.

Garget.—Will you tell me the cause of garget? I have a nice six-year-old cow that has it quite badly in one teat. Have tried beans and skoke root. C. H. G., Troy, Mich.—Garget is frequently caused by the cow bruising udder or from the choking, in some manner, of the circulation through the quarter. Treatment consists of saline cathartics, less feed, plenty of bedding, hot fomentations to udder and, if possible, the removing of the cause. When a cow has garget of one or more quarters of udder, it is a good plan to use a milking tube, as the milk can be extracted with less manipulation of quarter.

## 85-EXCURSION-85.

Mackinaw City, August 23d, Petoskey, August 24th.

On above dates special trains leave Michigan Central station, foot of Third St., at 7.20 A. M., for Mackinaw City and Petoskey, arriving at those points early in the evening. Tickets good for 10 days including day of sale. Full information and parlor car seats reserved at Michigan Central Ticket Office, corner Woodward and Jefferson Ave.

The Wabash Route to the G. A. R. Encampment at Buffalo.—The New Line to the East via Niagara Falls.—Fare, \$5.05 for the round trip. Tickets good going Aug. 21, 22, 23. Good for return to and including Aug. 31st. By depositing with Joint Agent limit will be extended to Sept. 20. Inquire Wabash City Ticket Office, No. 9 Fort St. W., or Union Station.

When writing to advertisers please mention that you saw their advertisement in the MICHIGAN FARMER.

## Farming Lands in Montcalm County

Good lands near good markets and railroads. County is well settled and has fair roads. For particulars call on or address STEVENS & TOWLE, Montcalm County Abstract Office, Stanton, Mich.

AGENTS WANTED to solicit business for the State Mutual Cyclone Insurance Co. Only reliable parties who will devote a considerable part of their time to the business wanted. Apply with references to the Secretary, Lapeer, Mich.

## THE GOLD FIELDS

—OF THE—

## KLONDIKE.

## GUIDE TO THE YUKON REGIONS

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In order to accommodate the demand for reliable information of this all-absorbing subject we will supply this book postpaid for ONLY 25 CENTS or send it free for only 2 subscribers for the balance of this year at 30 cents each. Address all orders to

THE MICHIGAN FARMER, Detroit, Mich.



## Miscellaneous.

### DID I BUT DARE.

When Sylvia's cheeks by breezes blown  
Assume a ruddy crimson flush,  
The milky paleness having grown  
Into a peerless rosy blush,  
I feel an impulse stealing on  
To kiss the maiden then and there;  
And so I would, and so I would,  
Did I but dare!

When Sylvia sits with me alone,  
While all within the house is hushed,  
And prattles in far sweeter tone  
Than ever robin redbreast gushed,  
I fain would clasp her to my heart,  
She seems so simply sweet and fair;  
And so I should, and so I should,  
Did I but dare!

When Sylvia's sparkling eyes shine  
Bright,  
Like twinkling starbeams in the sky,  
And every glance seems to invite  
My lips to hush her muffled sigh,  
I long in ardent soft caress  
To twine my arms about her hair;  
And so I could, I know I could,  
Did I but dare!

When Sylvia walks abroad with me  
The whole world wears a brighter hue;  
Her eyes seem fairer than the sea,  
Her lips than roses kissed with dew,  
I long to tell her love's sweet tale,  
To hymn her beauty, fresh and rare;  
And so I could, I know I could,  
Did I but dare!

And so my timid, craven heart  
Is filled with mournful, bitter care;  
For though I would, and should, and  
could,  
I do not dare!

—N. Y. Herald.

### THE JUDGE'S BURGLAR.

Judge Crabtree, having that day succeeded in collecting a bill against a man which he had never expected to get, felt on particularly good terms with himself and the world in general, and, furthermore, was perfectly willing that the whole world should know it.

"I am strongly inclined to think," he remarked, as he critically observed the gathering ash on his second cigar, "that my worst fault has from the first been that of underrating myself. I have always been a much abler man than I have given myself credit for being. I'll settle that matter next week," he said to me. "Come," I answered, "shell out, or I'll secure a writ of envoy extraordinary and minister plenipotentiary and settle you." And, as I expected, the roll of those words just completely flabbergasted him, and he shelled out then and there. If I hadn't been so modest I think I should have got on better."

"Yes," observed Maj. Dodge, "modesty is your besetting sin. There is not the least doubt in the world that if you could always deal exclusively with men like this one, who don't know the difference between a pug puppy and an ocean greyhound, that you would get along gloriously. Men of that stamp do occasionally knuckle under to men of yours."

"Did I ever tell you," went on the judge, not deigning to notice the other's remark, "how I outwitted the burglar when I lived at Syracuse?"

The question was put to a vote, and it was decided that as far as they were aware, and they generally remembered the judge's stories, he never had told how he outwitted the Syracuse burglar; so he went on:

"I suppose the burglars at Syracuse are among the brightest in the profession. I don't pretend to account for this; I simply state it as a fact. They are a clear-headed, energetic, intelligent body of men, quick to take up with new ideas, and fertile in inventions, and withal they are liberal and broad-minded. For instance, a few years ago, instead of crying out against time locks as cruel and unjust, in the way that many of the profession did elsewhere, the Syracuse burglars welcomed the time lock as an inevitable step in the scientific progress of the age, and set about devising a way to circumvent it. The result was that in a few months even the stem-winding, split-second time lock had no terrors for them, which, to my mind, is conclusive evidence that they put real genius into their work. But, as you will observe from my simple narrative, one of the most able of them fell before me.

"I had been down at Cortland on a case which kept me late. On the way up the train collided with a cow and delayed me further, so that I did not arrive in Syracuse till past 1 o'clock, and it must have been almost or quite 2 before I turned into the street where I lived. It was a fashionable part of the town, where the houses were gen-

erally large and stood some distance back from the roadway, with well-kept lawns covered with shrubbery, trees, fountains and cast-iron animals from the leading foundries. I was proceeding up the gravel walk when I noticed something in the moonlight at my dining-room window. I stepped into the shadow of a cherry tree (emblem of George Washington), and saw that it was a man with a short ladder. I instantly knew that it must be either a burglar or a book agent. The chances seemed to be in favor of the burglar, and it was very clear that he was about to go through my house. My first thought was to call for the police; then I remembered that there were never any of these worthy beings in that part of town at such a late hour. I was on the point of setting up an outcry anyhow, and if I had done so I should have made the startled atmosphere vibrate; but it then further occurred to me that it was customary in our neighborhood, when we heard a citizen yelling 'Burglar!' or making any similar heated nocturnal remarks, for everybody to turn over, and cover up his head with the bed clothing, and relapse into further soothing slumber; so I refrained from any vocal effort whatever. That my shouts would probably frighten the burglar away seemed possible, but that would not be capturing him—something I had felt a strong desire to do from the first. The idea of running and fetching the police also came into my mind, but I feared the man would finish his work and be off before I could get back. Another notion which popped into my head was to rush up and seize him by the legs as he went up the ladder and then to handle him in a boisterous and unfeeling manner; but for some reason—I've forgotten what it was now—I decided against this plan also. As a historical fact, I may mention that he was a large man, weighing not less than 228 pounds, and had a heavy iron jimmy in one hand.

"But when I looked again I saw that the fellow was actually starting up the ladder, and the thought of my family silverware and jewelry, not to mention the manuscript of my work, 'Crabtree on Contracts,' nerved me to effort. A plan of action instantly flashed into my mind. It often happens that way with me in times of great emergency. I butted my head against the cherry tree, smashing my silk hat, threw off my overcoat, rolled up my trousers, cast away my collar and cravat, and rushed up just as the man was half-way in the window, and said, in a gruff voice: 'Wot yet doin', old hoss?'

"He instantly came down the ladder, feeling for his weapons in a superfluous, disagreeable way that made me wish for the moment that my plan of action had not flashed so instantly across my mind.

"Go in' to work old Crabtree, be yer?" I continued. "Now see year, lemmy in wid yer on this. I was on the ground 'bout as soon as you was."

"That's just the way I talked to him, and it had the desired effect. He put up his pistol, grasped my hand, and we struck a bargain to rob the house together and divide the swag equally. We couldn't have come to an agreement with more neatness and despatch if we had been practical politicians at the opening of a campaign. It's just as I told you about those Syracuse burglars—they're a very superior class.

"We accordingly both went up the ladder, and were soon hard at work on the lower floor. I explained my familiarity with the surroundings by saying that I had done a little job there two years before. It made my blood boil to see him doubt the genuineness of some of my best solid silverware; and when the scoundrel dragged out a bottle of acid and actually showed me that it was plated, I was disgusted with him; but we got together a good deal of plunder, notwithstanding. 'Just you lay low now while I go upstairs and git the old man's leather and ticker,' I said to him. 'You'll wake up the old duffer, won't you?' he said, anxiously. 'Not much,' I answered. 'You don't know what a sleeper he is. He defended me once, and was asleep in court from start to finish, which is why I got two years.' I went up, and in a few minutes came back with my watch and pocketbook and told him that I was snoring like a fog horn. He recognized my ability as a burglar, and grasping my hand warmly, proposed that we always work together in the future.

"We had now made a pretty clean sweep of the house, and he suggested that it was time for us to bundle up our booty in the table cloth and be

going, as some of the police were early risers, and we might get pinched. This seemed a prudent view of the situation, and I consented. But if you think I had any intention of letting that fellow get away, you are not acquainted with my character. He stood no more show than did the man I collected the bill from to-day. There was a small closet at one end of the dining-room which had escaped his attention. We had got the bundle half tied up, and he was vigorously growling about the quality of the silverware, when I pointed out the closet and suggested its swag-containing possibilities. He instantly went over and stepped inside. I as promptly closed and locked the door. Then I went into the library, got a sheet of paper, and wrote this on it for the benefit of the servant girl in the morning:

"Notice.—Enclosed find one (1) burglar. Don't disturb." Crabtree.

"I then closed the window, turned out the gas, brought in my overcoat from the lawn, and went upstairs to bed. I was tired, and in five minutes was sleeping soundly.

"Having been up so late the night before, I of course, did not waken very early in the morning, and the entire family was stirring some time before I was. When Mrs. Crabtree got down she found the breakfast served, but the closet was undisturbed, our dining-room girl being a young person of extreme good sense. On the girl's calling her attention to it, Mrs. Crabtree read the note on the door simply remarking, 'Very well, do not disturb it.' Mrs. Crabtree, gentlemen, is a lady who seldom gets excited. The children, of course, with the natural curiosity of youth, asked some questions, but their mother merely said to them: 'Your father has got a burglar locked up in there. It doesn't interest us.' As I remarked, Mrs. Crabtree is a woman of rare self-possession and extraordinary common sense. She said afterwards that it was amusing to hear our little girl, aged 4, shout through the keyhole: 'Hello, Mr. Burglar!' and, 'Did papa lock you up because you were naughty?'

"About 9 o'clock I arose and went down to breakfast. When the burglar heard my voice in the dining-room he made some uncomplimentary observations from the other side of the door, but I paid no attention to him. I related the occurrences of the night before to Mrs. Crabtree, and after breakfast went into the library and spent a half hour over the morning paper, reading with special interest Ald. Moggerty's speech before the council the night before in favor of cutting down the police force in the interests of economy. Then I went to my office. Here the first thing I did was to send a note to the chief of police, short, and to the point, about as follows:

"Dear Sir—I have one large, thick-set burglar stored in my china closet. Please remove the same at the expense of the city immediately.

"Yours truly,

"J. A. CRABTREE."

"When I went home at noon he was gone. What do you think about the latest phase of the Cuban question, colonel?"

"Hold on, judge," broke out Maj. Dodge; "finish your story before you tackle the little matter of international difficulties. Don't amputate the climax."

"Haven't I finished it? Didn't I say that when I got home the man was gone? Do you think I followed up his subsequent career? Got an idea that I sent him flowers in jail and put him on my calling list? Harboring the notion that I ran down to Auburn prison every visitors' day, and had a fatherly cry on that scoundrel's neck for old association's sake?"

"You miss the point, judge," persisted Maj. Dodge. "Dick Bailey, of Utica, told me the whole story, and if you don't—"

"I question the good taste of this, major," interrupted the judge, with feeling. "Only a life-long friendship saves you. I said that when I got home the man was gone. He was—very much so. But the fact is the miserable wretch broke out after my departure, intimidated the woman and children, locked them all in another closet, and then calmly looted the house, not missing my wife's jewel case, put his plunder in my best alligator skin bag and walked out the front door, borrowing a light for one of my cigars from the coming chief of police at the corner, and made his escape. I got an anonymous note from him the next day, saying that if he ever went into the junk business he would call for the silver-

ware. And that evening Moggerty got his pet scheme through, reducing the police force one-half.—Harper's Magazine.

### The Greenhorn's Advantage.

I was sitting on a keg of nails in a West Virginia mountain store watching a native dickering with the merchant over a trade of a basket of eggs for a calico dress. After some time a bargain was closed, the native walked out with the dress in a bundle under his arm and I followed him.

"It isn't any business of mine," I said, "but I was watching that trade, and was surprised to see you let the eggs go for the dress."

"What fer?" he asked in astonishment, as he mounted his horse.

"How many eggs did you have?"

"Basketful."

"How many dozen?"

"Dunno. Can't count."

"That's where you miss the advantage of education. With knowledge you might have got two dresses for those eggs."

"But I didn't want two dresses, mister," he argued.

"Perhaps not; but that was no reason why you should have paid two prices for one. The merchant got the advantage of you because of his education. He knew what he was about."

He looked at me for a minute, as if he felt real sorry for me. Then he grinned and pulled his horse over close to me.

"I reckon," he half whispered, casting furtive glances toward the store, "his eddication ain't so much more'n mine ez you think it is. He don't know how many uv them aigs is spiled, an' I do," and he rode away before I could argue further.—Boston Herald.

### Forest Destruction.

It does seem that the average American will or can learn nothing by experience, and that he is likewise the most naturally improvident individual living. It would seem that he would learn something by the experience of the past two hundred years in the gradual but most effectual destruction of the forests and timber tracts of the country from the Atlantic to the mountains, and more recently from the lake to the gulf, but such is evidently not the fact. The same wanton and useless destruction of the most valuable timber goes recklessly on. The supply of maple is by no means large, and its use for flooring is steadily increasing. What is left from the flooring must certainly be of some use as lumber. But, consider this, from a North Michigan maple flooring mill. They report that less than 20 per cent of the product of the tree is available for flooring and the balance is wasted. They make flooring only; there is no demand for fire wood even, and this enormous percentage of over four-fifths is thrown away. These mills are forming combinations to keep up the price of flooring, and throwing away 80 per cent of their output. Surely there should be some method devised by the government, or something to protect the maple from such wanton waste.—The Tradesman.

### Puzzling English Advertisements.

A London periodical recently offered a prize for the best collection of unintentionally amusing advertisements. Here is a part of one list. It embodies illustrations of the curious effect which the misplacing of a comma, or of a word or two, often has upon the meaning of a sentence:

"Annual sale now going on. Don't go elsewhere to be cheated—come in here."

"Wanted—A room for two gentlemen about 30 feet long and 320 feet broad."

"A lady wants to sell her piano, as she is going abroad in a strong iron frame."

"Lost—A collie dog by a man on Saturday answering to Jim, with a brass collar around his neck and muzzled."

"Wanted, by a respectable girl, her passage to New York, willing to take care of children and a good tailor."

"Respectable tailor wants washing on Tuesday."

"M. Brown, furrier, begs to announce that he will make up gowns, capes, etc., for ladies out of their own skins."

"A boy wanted who can open oysters with a reference."

"Bulldog for sale, will eat anything; very fond of children."

"Wanted, an organist and a boy to blow the same."

It is made well and it makes people well—Hood's Sarsaparilla, the one true blood purifier.



## The Dairy.

We have a complete Dairy and Farm Creamery in constant operation on the Experiment Farm at Climax, Mich. This is personally conducted by J. H. Brown. All dairy correspondence should be sent to Climax, Mich.

### THE EDITOR'S DAIRY NOTES.

#### GRINDING CORN AND COB FOR DAIRY CATTLE.

A dairy friend, who uses a one-horse sweep power to crush his ear corn, does not see why this feed is not just as good as if very finely ground. He asks why it should be ground fine.

"Does the cob have any value in itself? I see some writer says he had just as soon feed sawdust as cob."

We would not feed cob meal if we could secure plenty of bran at a reasonable price to mix with the corn meal. Cobs have some feeding value, if properly ground, but we now feed very little cob meal.

As we have said before, if our friend has noticed the manure from cows fed as above suggested, he may have seen more or less undigested corn in it. This is voided without being assimilated, as it would have been had it been finely ground.

For feeding dairy cows we should endeavor to grind both corn and cob as finely as possible. If both are ground together, the cob must be ground rather fine, in order to reduce the corn. The hard, flinty plates, or casing, in which the germ end of each kernel is inserted on the cob, are seldom torn to pieces in the average grinding mill, and some veterinarians claim that they are liable to injure the mucous membrane of the stomach and intestines.

We have fed more or less corn and cob meal for some years, and have never located any injury from feeding the cob. However, we always try to have it ground very fine. The mill we use does this work to perfection, and visitors can hardly find the particles of cob in any portion of the meal.

The finer this grain (with the cob) is ground for general feeding purposes, the more perfectly will the whole be assimilated in the digestive tract. It will be more thoroughly masticated and mixed with the gastric juices, and less feed will be needed to produce a given amount of milk.

The cob has some value in itself, according to our chemists, but we feed it more to lighten the heavy corn meal, and not use so much bran, especially when we have to buy it in large quantities. The cob also prevents the impaction of the corn meal in the stomach, by holding the particles apart. When ground together, the mixture of both corn and cob is more perfect than any mechanical mixture of corn and bran.

But corn and cob meal is too heavy for a well balanced ration, and we use both oats and bran in connection with fodder in feeding those cows now giving milk.

Cobs are of considerable value on the farm, whether used in a grain ration or not. We save all those in our seed corn for starting fires, and as our seed is all fire dried, the cobs are perfect kindlers. We hate to see a single cob wasted, as a by-product of the farm.

If our new power windmill easily handles both the crusher and grinder at the same time, we may try cob meal again this coming winter. At any rate, every cob will be utilized. We have a good corn sheller and will run nearly every ear of corn through before feeding, whether the corn is all ground or not.

#### SILLO CONSTRUCTION.

A long string of questions about silo construction are at hand, and we answer a few of them herewith. The writer thereof was in a hurry, so we replied by mail, as several stamps were enclosed. The following replies to this correspondent will answer several other inquirers:

If you are to keep a dairy of a dozen or more cows, the silo is what you want. We do not recommend the silo for the general farmer who keeps a few cows, horses and sheep.

The best form of silo the writer has ever seen, is the circular one. It is stronger and cheaper to build, and preserves the ensilage in much better condition.

You may be able to use hard wood timber for the sill, studding and roof, but even pine or hemlock will be better. All the frame needed is built of 2x4 studding placed on end. If this is of hard wood, it may be badly sprung by the time you wish to use it. Once in place, it will be all right.

Of course pine lumber will be best to cell up the inside, and also for outer

siding. Use two thicknesses (one-half inch thick) inside, with tarred building paper between.

Your foundation of stone need be only high enough to secure good drainage. For holding ten acres of corn, it is impossible to tell just how large the silo should be. Fifteen tons of corn per acre is a good yield, and it would not be far out the way to build the silo of 150 tons capacity. This would need to be about 18 feet in diameter and 28 feet deep.

For information regarding a tank silo, see back issues of The Farmer; or better still write some advertiser who manufactures such a silo complete.

For The Michigan Farmer.

#### SHALL WE ADOPT NEW METHODS?

The time of year is here again when the average farmer who is dairying only on a small scale, keeping two to four cows without ice, dairy house or any of the modern conveniences, finds that he must have a disposition like the prophets of old to keep from selling off all the milch cows, and going without two of the necessities which constitute part of our every day food—milk and butter.

In some of our homes the majority of the disagreeable tasks fall upon the housewife, especially where people are still using the shallow setting process.

Milk, when it is brought to the house, is usually left for the "women folks" to care for. Where one has one or two 14-quart pails full of the fluid to strain into pans, which when full hold four quarts, or three quarts to handle conveniently, for a milking of 24 quarts it would require eight pans or sixteen for the day.

Now the washing, scalding and rinsing of these 16 pans each day is far from being a pleasant task. Then, too, each one of these pans has to go through a skimming process, which requires a considerable wind to blow off all the fine particles of cream which escape the skimmer. But it must come off if the "blower" has to start a small cyclone to do it.

After skimming, the cream is placed in a crock to multiply the bacteria, which have already made a good start, and then comes the pleasant job of churning, which the boys and girls all delight in doing before breakfast (so poets say), so they can have some of the delicious buttermilk to drink, which is so invigorating and healthful.

This is one of the shady sides of farm life, or should be if one has a shade tree to churn under.

But perhaps one of the greatest pleasures connected with the dairy-room, where one has to use the kitchen for such purposes, is when the cream is in the churn, company expected, but the stuff won't "come." It is then that the manipulator shuts his (her?—Ed.) jaws tighter and tighter with each revolution, at the same time gaining velocity till the old frame squeaks and hops around on the floor as if "possessed."

At the last moment wheels are heard entering the yard. The churn is revolving 200 times per minute—there is a mismove—and off goes the cover and the cream makes a circle round the room, from ceiling to floor.

When such accidents occur, if it is out doors in the shade of some beautiful tree, or on the shady side of the house, where the grass is clean and sweet, the cream can be "scooped up" with the palms of your hands. It is then replaced in the churn, and when done how can it help but be "grass" butter, which dealers pay such handsome prices for? When away from home I have seen just such cases (never had one yourself, of course.—Ed.), and have been tempted to prepare an article on grass butter.

What is the use of all this old-fashioned way of doing things, when it is just as cheap and a good deal easier to care for the milk and butter in some of the many new methods?

There are not many farmers but what have windmills or force pumps, which can easily be made to carry the water to any place in the house. Gas pipe is not very expensive, to convey the water to the tank, and any one with a bit of genius, can in a short time make such improvements over the shallow setting process, that, after using it for a short time, one will wonder how one ever got along without the change before.

Some seem to be so prejudiced or afraid to make the change from the inferior to the better way, that they continue to follow along the old lines till they do not realize the great change

that has taken place in the last quarter of a century.

My earliest experience in dairying is the sweet remembrance of churning with a dash churn. Three times every week, about 4 o'clock in the morning, a familiar voice, which we dreaded to hear, came vibrating up the stairway: "Boys, boys; come, roll out! Churning to do this morning!"

There is no use calling the dash churn old fashioned, for many use it with good success, but we can surely say, without offending any one, that to discard the open pan for the deep setting can, is a step in the direction of improvement.

ELIAS F. BROWN.

Hillsdale Co., Mich.

#### MANAGEMENT OF CREAMERIES.

Will Geo. E. Scott give a description of the creamery he is manager of in Jefferson county, Ohio? Size of building, construction and cost. Equipment and cost. Size of boiler and engine and how placed. How many directors do you have? Does the business manager attend to the selling, etc.—J. A. S., Clyde, O.

As a rule, those most interested in the work of getting up an organization for the purpose of making up the milk of a neighborhood into butter and finding a market for same, are mostly inexperienced, as were those who took up that work in our creamery. No doubt some of us have lots to learn yet, but certainly there are at least a few important features in the whole operation, from start up to date, that we will not have to learn over again and some of these are very important indeed. I shall proceed to answer J. A. S.'s questions and then bring up some other very important points that have been asked at times.

Our creamery is a two-story structure, the basement being made of an 18-inch wall on nearly three sides, the wooden side facing to the north. The rooms in that basement consist of a churn room, with cemented floor, drain at one corner; a cooling room, and back of it a refrigerator, the two latter about 10 feet square; an engine room about 12x17; joining at one end a single story boiler room, 10x22.

The top story, on level of roadway, is 22x36 feet, with 6x10 feet at an elevation of 3 feet above floor. This is the weigh or receiving room, and beside it, 6x12 feet, an office on level with general floor; the balance, 22x30, is occupied with vats, separator, tester, cooler, wash vat, etc. The milk is weighed in at scales and there is no lifting of milk or cream, as everything goes by gravity. Our operator, a man of 20 years' experience, tells us that it is the easiest factory to work in he ever saw, and we find our basement churn room a prize for summer work, with the cooling and refrigerator rooms practically under ground. There is no lifting of skim milk by patrons, as it is drawn by gravity from a tank on upper story into wagons on roadway on level with basement story. Our engine is eight-horse, horizontal, and boiler ten-horse power, also horizontal, and are in separate rooms. Our advice is not to buy a vertical boiler and engine.

Our equipment was put in by one of the many reliable companies doing business, and cost us about \$1,400. The building was erected by contract and cost nearly \$1,000. This does not include two wells, a large cistern and windmill. The company selling the equipment placed it in the building and ran it two weeks, making it do first-class work.

Many companies make the too common mistake of employing cheap, incompetent operators. If there is a time when a creamery needs competent help it is right at the very start, and any mistake made at that time can hardly be repaired without great loss and much irritation. The man who makes the butter practically makes or breaks the concern for which he works, and cannot be too well equipped for the duties devolved upon him. If he is a thorough, wide awake fellow, he knows just what kind of butter he is going to make the minute he has all his milk in for the day. If that is good, the first best point is scored. If his equipments are in good shape, clean and in best repair, success is absolute, with a single provision—that the cream is churned at the right temperature and acidity.

The latter conditions vary so much in different localities, owing to breed of cattle and feed that they consume, few operators can tell at first what they can do. For instance, our milk

here is from Jerseys, and the pasture for summer largely bluegrass mixed with white clover, and the cows fed a small grain ration all summer, which insures a solid butter and churning at quite a low temperature during the heated season. Yet these same cows produce a class of milk in winter that must be churned at 60 degrees, if it is to be worked out into prints, as it soon becomes so solid that it will not print at all if churned at a lower temperature.

While it is of great importance to have a quality of butter first-class in every respect, which will advertise its merits wherever it goes, yet it is quite a bit of work to get it into a good, appreciative market. In answer to J. A. S.'s inquiry, will say that it is supposed to be the duty of the manager of a creamery to sell the product of the creamery and to superintend all matters pertaining to its management. At the same time it is very important that the board of directors shall consist of representative men who are ready to advise and back up every act of their manager. Our board consists of five directors, a president and a secretary-treasurer. The president has no vote except in the case of a tie. The secretary has the right to join in the discussion of motions, but no vote, and receives pay in monthly salary for keeping minutes of meetings, making out pay roll and keeping our books; collects all bills and disburses all moneys. Our creamery, operated on the co-operative plan, pays its patrons on the butter fat alone, which is by far the best method of dealing with them, since all proceeds go to them after deducting 6 per cent interest on capital stock, 3 per cent on gross earnings, repairs and the expense of running the plant. The per cent of fat found in each patron's milk regulates the division as nearly perfect as can be done.

I am fully persuaded that co-operation is the best method for the dairyman when properly managed, and there is no reason why it cannot be managed just as perfectly as any other method if good men are at the head of the concern and keep their heads instead of losing them. If run on purely business principles success is assured.

GEO. E. SCOTT.

For The Michigan Farmer.

#### WORK OF SEVEN HOLSTEINS.

I send you a record of my cows for the last 15 days of May. (My herd are all pure-bred Holsteins:

No. 1 calved Jan. 28, 1897.

No. 2 calved Feb. 2, 1897.

No. 3 calved Feb. 9, 1897.

No. 4 calved Mar. 7, 1897.

No. 5 calved Mar. 13, 1897.

No. 6 calved about Apr. 15, 1897.

No. 7 calved about Apr. 20, 1897.

As I did not weigh each cow's milk, cannot give you figures for each day, from each cow, but take them from cheese factory weights at Novi, as I take my milk there.

In the last 15 days of May I drew 6,118 lbs. milk, an average of 407 13-15 lbs. per day, or an average of 58 lbs. per cow per day.

In the month of June I drew a total of 10,693 lbs., averaging 1,527 4-7 lbs. per cow for the month.

FRED P. SIMMONS.

Oakland Co., Mich.  
(This is an excellent record for quantity, but we are sorry not to have the test for butter fat also. Will the herd average three per cent fat?—Ed.)

When writing advertisers mention Mich. Farmer

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Cure sick headache, bad taste in the mouth, coated tongue, gas in the stomach, distress and indigestion. Do not weaken, but have tonic effect. 25 cents. The only Pills to take with Hood's Sarsaparilla.

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# THE MICHIGAN FARMER

State Journal of Agriculture.

THE LAWRENCE PUBLISHING CO.,  
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" 50 " " 100.....10 " "  
" 100 " " 200.....15 " "  
" 200 " " 300.....20 " "  
" 300 and over.....25 " "  
No deviation from above rates.

DETROIT, SATURDAY, AUGUST 21, 1897.

This paper is entered at the Detroit Postoffice as second class matter.

## AGENTS WANTED.

We want an Agent at every fair and picnic to be held this fall. We furnish everything needed free, and our terms to club raisers are more liberal than ever before. Send us a list of the places you can attend so that we can reserve them for you. We are particularly anxious to have our friends in other States represent the "Farmer" at all public meetings they attend, as it will pay well to do so. Agents wanted everywhere. Write for our outfit and terms to agents.



## IMPORTANT EXCURSION.

As the First Annual Michigan Farmer Excursion leaves the D. & C. docks, foot of Wayne street, on Monday next, the 23rd, at 11 p. m., this will be the last chance for those wishing to go who have not already made arrangements to do so. If you will at once send us two dollars as part payment, we will secure berths for you. We will also assign berths up to the time boat leaves, so you can come anyway, and we know you will have a nice time at a very low cost. Mr. A. H. Zenner, of the Zenner-Raymond Disinfectant Co. has kindly given us the use of their fine offices in which to hold a meeting Monday night before going on the boat, in order that we may all get acquainted. Mr. Lawrence will be there and will issue badges, receive final payments and issue tickets. Be sure and be there by 8 o'clock p. m., or earlier if possible. Mr. Zenner's offices are at 11-13-15 Atwater street, corner of Griswold street, one block from the river and two blocks east of the D. & C. docks, where we take the steamer. All come that possibly can, and bring your friends. Be sure and be at the meeting, as it is important. Bring the address with you so as not to forget it.

Dr. Clute, president of the Alabama Agricultural College, has resigned. He was formerly president of the Agricultural College at Lansing.

## THE STATE FAIR.

The next fair of the Michigan State Agricultural Society will open on the grounds of the West Michigan Agricultural Society on Monday, September 6th, and close Saturday, September 11th. The Fair is to be complete and in full running order Monday morning, which has been set apart as a visiting day for several societies, so that entries will necessarily be made, and all goods and animals be on the ground before that day.

In connection with this announcement we wish to say a few words about the Fair, and why it should be maintained in a manner creditable to the State. Michigan is the only State in the Union holding an annual fair which makes no appropriation for its maintenance. Legislators assert that if the people want a State Fair they will uphold it. We have no desire to start a controversy over this point, only to state that the opposition to any aid being furnished the State Society came almost entirely from the farmers themselves, for whose benefit the Fair was inaugurated and sustained. With this decision we find no fault, except that appropriations of a like nature—namely, for educational purposes—should all be placed on the same footing, for the State Fair is certainly an educational institution, and in the past has done great service in aiding the development of the agricultural resources of the State, and spreading a knowledge of everything new and useful in agriculture among its farmers. It certainly did a grand work in developing the live stock interests of the State, and we doubt if any other institution could have done this as efficiently as the State Fair.

It now comes to the question of its future, and that rests entirely with the people of the State, more especially the agriculturists. They have the power to place the State Society in a strong position, enabling it to make its annual exhibitions worthy of the State and its agricultural and industrial interests. To those interested in improved live stock a State fair is a positive necessity, as in no other way can the farmers be made so well acquainted with the various breeds and their merits and characteristics as by means of such annual exhibitions. The same is true of agricultural implements and machinery, new varieties of grains, fruits, vegetables, etc., etc., and new and improved appliances in the dairy and apilary. In fact, the uses and value of a State fair are not fully appreciated, nor are they used nearly as much as they should be.

The State Agricultural Society is in better shape financially than for some years. The big load of debt it has been carrying has been lifted from its shoulders. For the first time in years its managers see light ahead. They have hopes of a successful fair this fall, and their reliance is upon the people. As our valued correspondent, Mr. Gard, says in another column, it is the people's fair. They control its management, and through their patronage must come the funds for its support. If its policy or officials are not liked, then go to the Fair and register your disapprobation at the ballot box. A dollar will admit you to the grounds, and give you the privileges of membership for a year. If you do not care to do this, then you should not find fault with the manner in which the affairs of the Society are conducted. But if you are a wide awake, intelligent citizen, wanting the State to progress and keep at the front in the advancement of its material interests, come to the Fair, become a member, take part in its management, and aid by your advice and counsel to make it an institution of which all good citizens of Michigan will be proud, and worthy of their

support and encouragement. It is your Fair, and your duty is to take hold and improve it in all respects.

## TAKING STOCK.

At the beginning of the new crop year, when the harvest is completed and the question of markets becomes of general interest to the farmer, is a good time to take account of stock and look ahead as to what the future promises. One good way to arrive at conclusions as to what the year promises is to compare present conditions and values with those obtaining at this time last year, and then compare the yields of the various crops. This will give a general idea of the result of the year's operations in the State at large, and the individual can readily apply the same results to his own particular case. First as to prices of farm products we give a comparative statement of the two years:

	1897.	1896.
Wheat, No. 2 red, per bu.....	91c	62c
Corn, No. 2, per bu.....	30c	25½c
Oats, No. 2 white, per bu.....	21c	24c
Rye, No. 2, per bu.....	46½c	30½c
Hay, per ton.....	\$9.50	\$10.00
Butter, per lb.....	16@17c	16c
Cheese, per lb, creamery.....	8½c	7½@8c
Eggs, per doz, fresh.....	13c	10½@11c
Poultry, fowls, per lb.....	10@12c	8 @ 8½c
Live hogs, per cwt.....	\$3.80@4.00	\$2.85@3.25
Sheep, per cwt.....	\$3.00@4.00	\$3.25@3.75
Lambs, per cwt.....	\$4.25@5.25	\$3.25@4.75
Cattle.....	\$2.50@4.25	\$2.00@3.50

In looking over the list it will be seen that a majority of the articles mentioned are higher than a year ago, while some show little variation, and others a decline in value. The principal articles which have declined are hay and oats. Hay will, however, bring more money into the State than a year ago, because of the increase in the crop. It is the largest hay crop in five or six years. Oats are lower, and the crop will be smaller, so we look for a certain advance in this grain. Corn is higher, but the crop will be much lighter. It will have to increase one-third in price over last year to bring in as much cash as the enormous crop of last year did. We look for a decided advance in corn, perhaps sufficient to offset the lighter crop. Poultry, eggs and butter are all higher than a year ago. There has been an advance in wheat of about 29 cents. There is a larger yield by nearly one-third than a year ago, and there will be marketed fully 12,000,000 bu. during the year. The increase in price will add \$3,480,000 to the income of the farmers of the State. Last year Michigan marketed 750,000 hogs. She should market more the coming year. Averaging them at 200 lbs., and the advance at 75 cents per hundred, each hog will be worth \$1.50 more than a year ago, or a total addition of \$1,025,000 to the receipts of the farmers for the year. Sheep have advanced 75 cents per hundred and lambs 25 cents. These prices will be advanced because there will be a smaller supply next year. The returns will be about the same in the aggregate as the past year. Poultry, eggs, butter and cheese will return fully as great a revenue as last year, while hay and rye will bring in more, the advance in wheat being reflected in the higher price rye is bringing.

Three big items are not yet in such a shape as to allow an estimate of what they will return. These are apples, potatoes and beans. Apples will be high in price, but the crop will not be one-third that of last year, and yet farmers may get as much money out of them as a year ago. We look for more money being realized for the potato crop than a year ago, and fully as much on beans. Peaches are likely to bring more actual cash into the State than a year ago, although the crop will be light. The surplus of ap-

ples and peaches last year demoralized the markets and gave growers very small returns.

Upon the whole, there is every prospect of the coming crop year being the best one which the farmers have had in the past five, and that the value of farm lands and live stock will show a handsome advance as compared with the disastrous years since 1893.

## FIRST SALE AT THE NEW YORK WOOL EXCHANGE.

The first sale of wool at the New York Wool Exchange was held on Wednesday of this week. The attendance was very large, and included wool dealers and manufacturers from all parts of the country. The amount of wool on sale was equivalent to 3,500,000 lbs. in the grease in 386 parcels. Domestic wools sold to better advantage than foreign. No Michigan wools were offered. Some New York fine, about like Michigan, sold at 24½c; delaine, 28c; fine clothing, which is unwashed fine heavy, with the delaine parts out, sold at 11½c; New York ¼-blood combing, unwashed, 19c; ¾-blood combing, unwashed, 18½c; ¾-blood clothing, unwashed, 17½c. The prices obtained, while showing considerable inequality owing to the difference in the various grades, are said to be better than the average of quotations by dealers. The grades mentioned above are such as approach most closely to Michigan wools.

It is evident the wool exchange is going to be a considerable factor in the wool trade hereafter. It is the one place where farmers can ship their clips, have them graded by an expert, and sold on their merits, just as wheat is graded when it reaches this or other markets. This system is a direct benefit to the careful wool-grower, and will exercise an important influence in improving the wools of the country, because such improvement will be paid for by manufacturers when bidding against each other.

## THE UNEXPECTED HAS HAPPENED.

It is about five years ago, during the heat of a presidential campaign, that anyone who claimed that tinned plate was, or could be, made in the United States, was denounced as a "tin-plate liar." Well, since that time tinned plate has been produced here in steadily increasing amounts until our foreign imports have decreased nearly two-thirds. In all the years of depression since 1893 the tin-plate industry has been steadily growing, and is now one of the recognized industries of the country. American protection has resulted in lower prices and a better grade of plate. It must, therefore, be rather unpalatable for such papers as the New York Times, the Philadelphia Record, and the New York World, to read the following Associated Press dispatch in their telegraphic columns the present week: "The first tin plate manufactured in America to be sent to Europe, is, according to local manufacturers, that started to-day by the American Tin Plate Co., of Elwood, Ind., on its way to Italy. It was a car load consisting of 500 boxes of the most expensive tin plate made here, and it is said this will be followed by other shipments, because of a growing demand abroad for American tin plate. The company will tomorrow make a similar shipment to England."

It may safely be assumed that American tinned plate will never again become a factor in a presidential campaign. It is an accepted fact.

## Mackinac Island Folder.

Have you seen one of the Michigan Central Mackinac Island Folders? If not, be sure and secure one from any of their agents. It gives full information regarding Northern Michigan resorts, which can be reached by taking the 65 excursion to Mackinaw Aug. 23d and to Potoskey Aug. 24th.



## SEEMS TO BE COMING OUR WAY.

The revised statistics of imports and exports for the fiscal year ending June 30, 1897, show a large increase in the exports over the previous year and a large increase in the balance of trade in favor of this country, notwithstanding the heavy importations in anticipation of the enactment of the Dingley law. The exports for the year amounted to the enormous sum of \$1,030,001,300, against \$863,200,487 for the year ending June 30, 1896. The imports amounted to \$754,717,609, against \$779,724,674 for 1896, and the balance of trade in favor of the United States was \$275,283,691, against \$85,476,213 for 1896.

It is expected that the figures for the present year will show a balance for the United States even greater than last year, for the reason that heavy importations made before the Dingley law went into effect will tend to reduce imports for some months to come, and at the same time exports of farm products promise to be large and at higher prices than last year. The heaviest anticipatory importations were of wool and of sugar—the imports of sugar being 1,010,894,798 pounds more than for 1896. The sugar imports from Germany alone last year amounted to over 1,500,000,000 pounds. If the country was producing all the sugar it consumes, the balance of trade would be nearly \$100,000,000 more in our favor, and that amount of cash would be circulating among the farmers and laborers connected with the factories. The beet sugar industry should not be lost sight of.

## GIVE THEM TIME.

We are receiving some complaints regarding the Home Treasury advertisement, all of which have been forwarded by us with a demand for explanations. We have received a very courteous letter from the firm in which they state that the entire cause for delay in responding to remittances by our readers is that they have been flooded with said orders and it was not possible to give all prompt attention. They promise us that every one who has sent them money will receive fair and complete attention at earliest possible date. We believe they will do all they promise. If any of our readers, after reasonable time, have still cause for complaint, we hope they will notify us.

## THE REASON WHY.

The very active demand from Great Britain and Europe for American wheat and flour, which has had such a strong influence in advancing prices in the face of a new crop of unusual size and quality, has been a great surprise to every one. But it is apparent these purchases are being made by shrewd men, who fully understand the situation. An article in Beerbohm's trade circular, a recognized authority in the grain trade, shows very clearly the reasons which are inducing foreign dealers to invest so heavily at this season in American grain. Here is an extract from it:

With regard to Russia many of those in a position to know look for an export next season of only 10,000,000 quarters, but we will assume that at the probable higher range of values, 12,500,000 quarters will be forthcoming. Then in respect to Roumania, Bulgaria and Turkey, we have no longer room to doubt that this year's crop is a very short one; 30 to 50 per cent less than last year is a common estimate. If the aggregate crop in these countries were only 33 per cent less than last year it would mean that only about 2,500,000 quarters would be available for export, unless, as one of our correspondents remarks, "the people eat corn instead of wheat." We will, however, assume that 5,000,000 quarters will be forthcoming from these countries. India we do not expect will send any but very trifling amounts from the present crop, but with an ordinary crop to be reaped next March and April, our Indian empire might easily ship 1,000,000 quarters to come in during the season of 1897-8. With Austria-Hungary a probable importer, the other minor countries, such as Chili, Uruguay, Algeria, Tunis, Persia, etc., can hardly be

## UNTIL JAN 1, '98, ONLY 20c.

In order to give all farmers not now taking the MICHIGAN FARMER an opportunity of becoming acquainted with our paper at a small cost, we will send it on trial every week until Jan 1 for only 20 cents.

We hope that our friends everywhere will do us the favor of bringing this to the attention of their neighbors who are not subscribers.

To every one who will send eight new subscribers for the balance of the year at 20 cents each, with \$1.60 to pay for same, we will send the MICHIGAN FARMER **FREE FOR ONE YEAR.**

Subscriptions may be sent as fast as taken and if the required number is not gotten we will allow agents full commission on all received.

We will gladly send sample copies free to all names sent us, or to anyone who will distribute them.

If you are going to attend a fair or picnic it will pay you to send for our free agent's outfit, as we want agents at all such places and in every community.

Address all orders for subscriptions and sample copies to  
**THE MICHIGAN FARMER, Detroit, Mich.**

looked to for more than 2,000,000 quarters. These items form a total of 20,500,000 quarters, and consequently leave 31,000,000 quarters to be obtained from America, Canada, Argentina and Australia. Neither of the two last named sources of supply can begin to ship new wheat until January next, so that even with a good crop we could not expect to send to Europe in time for the present season, more than say 3,000,000 quarters. If we accept this estimate it leaves America and Canada to supply not less than 28,000,000 quarters, 4,000,000 quarters of which will be wanted by extra European countries, so that Europe may be said to require 24,000,000 quarters from the United States and Canada, an average weekly export of 460,000 quarters, a quantity never yet reached, we believe, in the annals of the trade."

If these figures are approximately correct, dollar wheat is not only a possibility, but a certainty in this market, and these early purchasers will prove a very profitable investment on the part of foreign dealers.

## A PLEA FOR THE STATE FAIR.

To The Editor Michigan Farmer:

The State Fair is near at hand. The officers are desirous that the fair shall be up to date in all of its departments. In order to make it such the departments should be filled with meritorious articles. Every industry should be well represented. The State Fair is the people's fair; and they should see to it that it is made one of the best, most attractive, interesting and instructive of any the society has ever held. It can be done. All it requires is a little effort of all interested and the thing is accomplished. My only object in writing this letter is the interest I feel in the success of the State Fair. I wish to call the attention of exhibitors in the dairy, bees and honey departments of the fair to the fact that former exhibits have been entirely too small to properly represent those important and growing industries. I hope this year to see those departments represented by the largest exhibit ever made at a state fair. I wish to meet a large number of the cheese and butter makers of Michigan, and get their suggestions in regard to the management of the dairy department; also the premiums and their distribution. The dairy has become one of the greatest industries of the State, and it should be made manifest by exhibits at the fair.

The apirary is another one of Michigan's great and growing industries. The exhibitions at the fair are always attractive, interesting and instructive. I hope there will be at the coming fair an increased interest taken by beekeepers to make the exhibition more attractive and useful than at any previous fair. In conclusion, I will state that the committee having the matter in charge has set apart Monday, the first day of the fair, as a special day for the Labor and Trades Council of Grand Rapids, and the Modern Woodmen of America, and it is very essential that every department of the fair be in perfect order by Sunday night, Sept. 5th. In order to secure these associations, with their exercises upon the fair grounds on Monday, their La-

bor Day, it was agreed by the special committee having charge of the matter for the State Society, that the fair should be in running order on Monday morning, Sept. 6th.

Cass County, Mich.

M. J. GARD.

## NEWS SUMMARY.

## Michigan.

The Michigan Anchor Fence Company has been reorganized by Grand Haven business men. The capital stock is \$40,000.

Reports from Montcalm county are to the effect that bugs have reduced the yield of the coming potato crop fully one-half. The pests are also doing serious damage in other parts of the State.

Considerable hay in this vicinity has been allowed to rot on the ground this summer—in some cases because it was not wanted; and in still other cases because it could not be taken care of.—Portland Observer.

The gang of cattle thieves that has been causing farmers along the Indiana line so much annoyance the past few months is believed to be broken up. One of the members was captured in Indiana last week and brought back to Cassopolis, where he will probably be convicted of stealing 35 head of sheep.

The new state law which requires horseshoers to undergo an examination to determine their fitness and capability went into effect last week. The examinations are to be conducted by a state board of horseshoers and certificates will be issued to those passing satisfactory examinations. This law applies only to cities having a population of 10,000 or above.

The efforts of boys to rid the city of Detroit of English sparrows has proved quite a drain upon the county treasury, as a large sum has been paid in bounties. Complaints of damage done by the hunters and the danger of accidents has caused Mayor Maybury to refuse granting further permits and to instruct the police to arrest persons using rifles about the city.

The experimental plats of sugar beets, which are being grown in various parts of the State, are reported in good condition and very promising. The results of the analyses of the beets, which will be made late in the fall by the Agricultural College, will be watched for with great interest. Several owners of beet sugar plats report inquiries from capitalists who desire good locations for sugar factories.

## General.

It is announced that President McKinley has appointed Nathan A. Hitchcock, of St. Louis, Mo., minister to Russia.

Minneapolis millers have advanced prices of flour from 90 cents to \$1 a barrel within sixty days, owing to the advance of 22 cents in wheat.

United States Senator James Z. George, of Mississippi, died at Mississippi City, Miss., last Saturday. He

was 71 years old and had served in the Senate for 16 years.

Comptroller Eckels, of the national treasury department, who will soon be succeeded by Mr. Dawes, of Illinois, has accepted the presidency of the Colonial Trust Co., of New York.

The strike situation presents little change, although it is becoming apparent that the miners are tiring and will probably soon be forced to yield. Large bodies of strikers are camped in the vicinity of Pittsburg and have frequently threatened to attack the force of deputies or to bring on an encounter by refusing to obey the orders of the sheriff. However, thus far there has been no serious trouble. In Illinois large bodies are marching from town to town enlisting recruits and endeavoring to force working miners to join in the strike. Matters have appeared so serious at several points that the governor was appealed to for military aid, but thus far he has not deemed it necessary to order out the militia.

## Foreign.

The summer campaign of Gen. Weyler in Cuba appears to have been a disastrous one, and it is reported that he cabled his resignation to Madrid last week. It is understood that the mother country will request him to remain in charge as long as the present ministry holds sway. His army is said to be in bad condition.

A duel was fought near Paris last Saturday morning by the Count of Turin and Prince Henri of Orleans. The Count of Turin claimed that Prince Henri had written letters reflecting on the Italian army and demanded a retraction. Prince Henri refused and the duel resulted. The encounter lasted 26 minutes, during which time both men were wounded, Prince Henri receiving several thrusts in the shoulder and side that appear to be of a serious nature. His adversary was but slightly wounded in the hand.

## Resorts of Northern Michigan.

A most excellent opportunity is afforded by the Michigan Central to visit the resorts of Northern Michigan on their excursions of Aug. 23d to Mackinaw and Aug. 24th to Petoskey. Only \$5 for the round trip. Tickets limited to 10 days from date of sale.

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There is no question of the advantage of a LITTLE GIANT CREAM SEPARATOR in the dairy. It pays for itself every six months. One of its strong points is durability. E. J. Millard, of Russell, Kansas, wrote last week, "These are the first repairs on my separator, purchased of you, in over seven years." The repairs cost two dollars.

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## The Household.

CONDUCTED BY MRS. ELLA E. ROCK-  
WOOD, FLINT, MICH.

We should be pleased to have any of our readers who take an interest in household topics, send in their views and opinions upon any subject which is under discussion, or which they wish discussed. The invitation is general, and we hope to see it accepted by many. Address all letters for The Household to Mrs. Ella E. Rockwood, Flint, Mich.

### WOMAN'S WORLD.

With many a turn my steps I take,  
In many a crook and crevice  
And many a biscuit I must bake  
For Maud and me and Levis.  
I sweep, I dust, I cook, I rise  
Up in the morning early,  
I wash the breakfast dishes, and  
I churn, and dress the baby;  
I make the dust and dry leaves fly  
Against my new broom fairly,  
I chatter, chatter as I go,  
Because I rest so rarely;  
"For men may come and men may go,  
But I go on forever, ever,  
I go on forever."

I move about and in and out,  
While here the chickens feeding,  
And here and there at hawk to shout,  
But little are they heeding,  
I walk, I run, I skip, I hop  
From one thing to another;  
I stop to dress a bruise or cut;  
For the children run to mother,  
Then to the garden I must go  
To see what work is needed,  
For plants must be set out, you know,  
And then they must be weeded,  
For men can't stop, for they must go,  
But we work on forever, ever,  
We work on forever.

I scrape the tray and "put to rights"  
The dining room and kitchen,  
I then go in my room to sew  
And try to do some stitching.  
I wonder if there is on earth  
No respite from our labors,  
No time to go and gossip gossie  
With pleasant, friendly neighbors?  
Before I end this piece of work,  
And try to think a little,  
I throw it down and run and make  
A fire 'neath the kettle.  
For men must eat and go, you know,  
But women can go, never.  
Yes, men will come, and men will go,  
But we work on forever, ever,  
We work on forever.

### HOME CHATS WITH FARMERS' WIVES.

#### GETTING ALONG WITH WORK.

What a difference there is in women about getting along with housework? One will turn off a wonderful amount of work and have half the afternoon in which to rest; while another will "putter" around all day and not be half through when night comes. The first does her work equally as well as the other, only she is quick about it.

Let us see why it is that one accomplishes so much more than the other.

In the first place one woman is quick to act. She decides how to do a thing, and is half through doing it while the other is still pondering as to whether she will do it at all or not. The brain is on the alert, it grasps the situation, decides, acts, in one case; while in the other it is more slow in reaching conclusions, deliberating more carefully as to results before acting.

Then, too, the every movement of some women is made to count. When they go to the cellar they bring up everything which they are going to need at one trip instead of wasting time and strength in bringing a pan of potatoes, then going back again for meat. A large piece of pork may just as well be brought from the cellar and kept in the pantry, where it can be got from time to time without the wearisome journey down stairs and up again every time. The same is true of potatoes. Keep a pailful in the pantry, and do not run down cellar before each meal for just the amount required for that particular time. There are housewives who seem to spend half their time running up and down cellar. They keep all edibles there, bread, pies, cake, and from three to six trips to the lower regions are necessary three times a day.

"I do not see how any woman gets along without a creamery," remarked the friend with whom I spent the afternoon recently. It is such a nice place to keep cooked food in. Not being down cellar it saves all running up and down, and taking it all around is about the greatest labor saver in the farmhouse. Of course the milk occupies the cans, but the lower part makes an excellent refrigerator, roomy enough for all purposes, except storing crocks of butter, and even these in limited number are quite often found there. I wish every farmer's wife had a cabinet creamery and ice with which to properly operate it.

One of the places where a great many women get behind with their

work is in sitting at the table after all the rest have left it. Minutes slip away unheeded, and when at length a start is made to clear the dirty dishes away the clock points to the hour when another woman similarly placed would have been nearly through with her task. The resting spell may be needed, but it always seems to me much better to get right up and go at our work than to sit dreading it. The longer the waiting the harder seems the effort to begin. Valuable time is wasted in this way, and many a woman who is always behind with her work might find a great difference in this respect if she improved those minutes idled away after meals. I know that the temptation to do this is often strong, but the resting spell that comes when the work is all neatly disposed of is ever so much more satisfactory for the very reason that it is finished.

Is not this one secret of being able to get our work out of the way instead of allowing it to be always behind? Improve every minute. Don't stop to read the newspaper when you ought to be doing something else. Let the reading come afterward. It will be better all around.

It frequently happens that the men are not on time for their meals. The load of hay is late in getting to the barn, or there was a little more work to finish in a certain field and it would not pay to go back again. At such times improve the opportunity by washing up whatever dirty dishes there may be in the kitchen. Place the vegetables in covered dishes in the warming oven to keep hot and wash the iron ware. Empty potato parings, etc., and wash the pans and basins which are sure to be filled with refuse of various kinds in the process of preparing dinner. This will be found a great help afterward, and is far better than busying oneself with fancy work while waiting, as we sometimes see recommended.

In many ways will the woman who studies to keep her work well in hand find opportunity to push it along, and she will feel well repaid for the effort by the nice long afternoon to read, sew or rest in as she may elect.

### THIS WOMAN.

In a recent issue of this paper Editor Brown has a dissertation on some poor butter, wherein he mentions the environments of the woman who made it, and to the reading public in general and dairy people in particular propounds the question, "What are we to do about it?"

He says the woman who made it was a "hard worker," and, using these words as a pencil, I can draw her portrait as truthfully as if I had known her for years. Indeed, I do know her. She is to be found in every neighborhood. I have purchased, but seldom eaten her butter, and whatever my olfactory or gastronomic nerves may have remarked about that, I never felt anything but pity for the woman herself. She works so hard, and works against the odds.

Two cows are as few as a family can depend upon for a supply of milk and butter the year around. If she makes a little of the latter to spare, there are a hundred places where the few shillings are needed. Jersey cows, creameries, patent churns, ice, even a good cellar, are the things she must always think of as unattainable. If she really does turn that milk over and skim both sides she does so under the pressure of a great need, and the merchant who consigns the product to a back yard sepulchre has little idea of the pain and humiliation with which she has to battle.

She reads dairy articles setting forth the (to her) impossible things as a common necessity and possessed as a matter of course by every woman who attempts butter-making. If she goes to a farmers' club she looks at the pretty rooms with a keen envy and thinks, "Oh, I wouldn't have them see mine for the world!" She knows that if she had a chance she could do as well as any of them; but she hasn't the chance. For some reason they have not prospered, or else "He" is peculiar and does not think a woman needs anything better than his grandmother used. I don't believe there is one woman in a thousand but would rejoice to have her household nice and keep it so, but if "He" does not favor it, or fails to provide the means, what is she to do?

Of course she can choose between whining over her lot until every one grows tired of listening, and pretending she wants nothing better. By the

latter course she assumes all the odium of the poor butter and everything else. She will get it anyhow.

Centuries ago, the first man tried to lay the blame of his wrong-doing upon "this woman," and now a couple of his descendants get behind the counter of a country store, hold counsel over a crock of butter, and, with no thought of that member of their own sex who owns the cows, the poor cellar, the pans of milk set upon its floor, even the worn creature who stoops over to skim them twice, they elevate eyebrows, sniff scornfully, and lay all blame upon the woman.

"What shall we do about it?" Well, nature has a strong fancy for preserving the general average of the human race by mating extremes, and so long as Mr. B and I exist we will be likely to see some poor woman wearing herself out in pathetic effort to make something from nothing. It is not for all to be rich, not even what we call well-to-do. In this land of equality and liberty, whatever may be his ancestry or past, the young man who goes wooing wears no prophetic mark of poverty, and the woman who loves him believes in him implicitly. What would become of men in general were it not for this wise provision? Whatever measure Mr. B— and the dairy world take for the suppression of poor butter, I do hope they may not be too severe on the "hard worker" who makes it.

A. H. J.

### A BIT OF FAMILY HISTORY.

Once upon a time, so the story goes, there was a woman who lived on a farm. Nothing very singular in such a statement—thousands of women reside on farms, and are not ashamed of the fact, either. On the contrary, they are, as a rule, rather proud to acknowledge they are thus associated. But the subject of this article is one, particular woman. We will not vouch for the truth of the assertion that there are others similar, but we imagine her prototype may be found in many localities.

When Belinda Branch, at the somewhat giddy age of 18, united herself in the holy bonds of matrimony to John J. Evertoil, Esq., she was as handsome a girl as one would see in a day's travel. Her plump, rosy-hued cheeks, laughing blue eyes, and locks of golden brown, together with her innate dignity and modesty, secured for her a warm place in the heart of every honest farmer lad in the neighborhood; and each vied with the other in the sincere endeavor to win her approbation.

Conceive, therefore, the emotions of compassion and regret that were entertained for Belinda, and the feelings of resentment and jealousy that were entertained for Evertoil, Esq., when he stepped in and, after a brief, two weeks' courtship, carried off the prize! Think of a tight, crusty, inebriated, old bachelor, twenty years her senior, wedded to Belinda Branch! Think of it! And how did it happen?

Well, it was one of those cases (and they're by no means rare) where the parents are possessed of the idea that they know more about the sort of life companions their children desire, when arrived at marriageable age, than the children do themselves.

But we digress. As we have said, it was an instance of match-making on the part of Belinda's mother. Belinda had positively no say in the matter, and accepted her fate resignedly. It was thought by many, amongst whom were included Mr. and Mrs. Branch, that John J. Evertoil was the undisputed owner of an extensive estate. It was not until after the marriage that the truth in the matter leaked out. Through unsuccessful speculation and too frequent indulgence of his appetite for strong drink, his large farm, at one time free from debt, had become deeply involved. A portion of his personal property was also mortgaged. So that, contrary to her expectations of stepping into a home with an abundance of everything, where, because of the assistance of servants, but little labor on her part would be required, Belinda found herself face to face with a besotted husband on the verge of bankruptcy, mountains of work ahead and no prospects of securing anticipated relief; for, what did our worthy bachelor do but discharge his housekeeper the next day after their union, and then inform his inexperienced young wife that he expected her to take upon herself, unaided, the responsibility of caring for his household. That was what he got her for! Married in haste and re-

penting at leisure. But what profit the repentance, when the knot is tied?

It isn't a divorce case on the grounds of "extreme cruelty" that we have to tell you about next. No, no. Instead of resorting to the courts, a proceeding which she regarded with unconcealed horror, she settled down calmly to the inevitable. She didn't even upbraid her over-zealous mother for being the direct cause of her unhappy plight.

Irrepressible "Father Time," with his proverbial scythe, still kept on mowing, and year followed year in steady succession. Each one appeared to bring additional labors and troubles, yet Mrs. Evertoil trudged patiently along. At times her trials seemed more than she could bear; yet, with wonderful fortitude for one so young, she bore up under them. The quick, elastic step of youth speedily vanished, as did also the plumpness and bloom of her fair cheeks; while her shoulders bent far forward under the weight of the unnatural burdens imposed. And to what purpose did she exchange her life that had been so full of promise, for one of continuous drudgery, utterly devoid of a single moment's happiness or pleasure? The numberless little joys and comforts, bright spots in the lives of other women, were never hers. Her home formed for her a dreary prison from whose portals she seldom strayed. She disliked the idea of mingling in society, attired in dresses of her girlhood, which she had fitted over so often that there was absolutely nothing of them left worth remodeling. Beyond an occasional calico, she rarely purchased a new dress, and then it was of some cheap, coarse-looking material, which she made up herself, being too poor to procure the services of a dress-maker.

Poverty wasn't so pressing though but what his excellency, John J. Evertoil, Esq., could take supreme control of the butter and egg revenue; and, after getting a meagre supply of groceries, squandered what was remaining for whisky, on which he would get howling drunk three times a week as regularly as he ate his meals three times a day! They were not too poor for that—oh, no! This part of the program was strictly essential and had to be performed as faithfully as the sun rose and set, no matter if the mortgage continued unpaid, and barely enough money could be raised to discharge the interest on the principle!

Doleful indeed as may be the details of this story, it is not overdrawn. But the most mournful portion is yet to come. Firmly refusing to separate herself from this dire existence, the subject of our sketch remained working, drudging away, until, a broken-down, grey-haired woman at the age of 33, the grim visitor, death, prematurely claimed another victim!

And here appended is the epitaph, written by herself, engraved on the rude slab that marks her last resting place:

Here lies a poor woman who always was tired,  
For she lived in a house where help wasn't hired.  
Her last words on earth were: "Dear friends, I am going  
Where washing ain't done, nor baking, nor sewing,  
And everything there will be just to my wishes,  
For where they don't eat, there's no washing dishes;  
I go where loud anthems will always be ringing,  
But having no voice, I'll get rid of the singing.  
Don't mourn for me now, and mourn for me never,  
For I'm going to do nothing forever and ever!"

FEVERIL OF THE PEAK.

### SHORT STOPS.

Geneva writes: Will you admit another new comer to your circle? I do not know as I have anything of much benefit to write about, as I am only a housekeeper of few years' experience, but after reading the valuable letters of the Household in silence for so long, I think it no more than right that we all try to encourage our editor with a few words of appreciation for the good that she is trying to do for us all.

Lillian W., I was so glad to read your letter of a few weeks ago. I, too, love the farm, and though I sometimes get very tired with the work there is to do, I think how much easier it will be when our little ones grow up to keep them at home than if we lived in the towns where vice is on every hand to lure them away; and I often think when I hear the farmers' wives bemoaning their hard lot, who it was that placed them in that position. I think they (the most of them) married that farmer from their own free



choice. Then let us make the best of it and enjoy life while we may, for it lies in our power to make home pleasant or miserable.

Now, hoping this is not too long for a first attempt, I will close by sending to the Household sisters a recipe for icing for a cake that is delicious.

(Recipe will be found under head of Contributed Recipes.—Ed.)

A. H. J. writes: Ants are liable to appear at any time during the hot weather, and add much work and vexation where there is already plenty. There are many remedies given, but mine is to hunt for the nests and scald them in the evening when all are at home. The nests may be thirty yards or more from the house, and sometimes it takes the whole family some time to find them. But when once found, and treated thoroughly to hot water a couple of times, I never have had any further trouble from them.

Bitter Sweet writes: I know from experience that a hired girl's life is not strewn with roses. She is obliged to begin work early in the morning, and in the busy season you are fortunate if the supper dishes are washed and table ready for breakfast by 9 o'clock. When Saturday comes you may work with willing hands in anticipation of spending Sunday with your family, but madam may inform you that she does not propose to eat a lunch, and insists upon your remaining. Or, when you return you find the dishes piled up, left for you to wash. I have worked in homes where all tried to make it pleasant and homelike for the hired girl, and some where it was not so pleasant. For my part I prefer to work in town. You get better wages and lighter work.

Will some one send recipe for old-fashioned molasses cake?

#### FROM A NEW CONTRIBUTOR.

Dear Household Sisters: I was just reading the chat, "A Glimpse of Home Life," and I could almost hear the whirr and hum of the machinery in that dairy room and see Editor and Bertha at work. I can see, too, the house and out-buildings, and, beyond, the broad, smooth fields. Then I look out of the window and my eye meets nothing but pine stumps, blackberry bushes and rye standing in shocks, and my heart turns with a little home-sick feeling to dear old Genesee, but the good man and the little ones are all here, so I try to content myself and remain, as they are the only ones in this world who have any claim upon me.

I think Nancy Jane has about the right idea of the poor hired girl. You see I have been the hired girl, and later the mistress, and I know whereof I speak when I say it is as often the mistress as the girl who needs to be pitied. Mrs. Mac's instance in the Household (July 31) is very rare, and if the girl as Mrs. Mac says is a very nice one, she would have little trouble in finding another home, and I think it would be serving the mistress right to be her own servant for a while.

Why doesn't some one write about children? They are to be the men and women in a little while, and we will be the old folks. I wonder how many think of this? Yesterday, as I rode into town, I heard a mournful little cheep, and looking to one side of the street I saw a little boy, some ten years old, holding up a young bird by the neck, while four others were lying on the walk, some of them dead, the rest crying out mournfully, while the mother bird was fluttering around trying to save her little ones. It seems to me if this boy had been taught that it was wicked to give pain in this way he would not do it again. I think it is dreadful—the indifference of some parents in this respect.

Some time ago a sister asked for a remedy for worms in children. Experience has taught me that the simplest remedy is the most effective. For worms I always use catnip. Make a strong tea, sweeten a little, and let the child drink all it will of it. I have always used this with good results.

And now, as it is nearly 11 o'clock, and I have four men besides the regular family of seven to get dinner for, I will close for this time. If I get a welcome I may come again sometime.

Tuescoia. AUNT EM.  
(Here's the editor's hand in welcome cordially extended, Aunt Em. Glad to hear about the catnip remedy for worms. We have no babies of our own to need it, but we frequently meet with those who do. As you say, simple remedies are sometimes most effective.—E. E. R.)

#### CANNING CORN.

After repeated trials and failures I now can corn in glass cans so that it will keep, that is, as long as we will let it. As the recipes I have seen do not go into particulars enough, I will tell you my way. Take corn not too ripe, still in the milky stage. Cut into the corn-down the rows and then scrape out the inside (leaving the hull of the corn on the cob), and pack it into the cans. I cut down a wooden potato masher till it would just go into the top of a can, and packed it with that. The milk of the corn will run over the top. I stood the cans in a basin while filling, so as to save the milk, which I used in a dish for supper (that is another recipe). You should have new rubbers and tops that are perfectly good. Now when the can is full, put on the rubber and screw the top down tight. Right here is where I always failed in keeping corn. I could not believe but that the can would burst when it was in boiling water if the top was not left a little loose, so that the air could escape. But you just screw the top down tight, for I have tried it, and I know it is all right. Place the cans in the boiler with plenty of corn husks around to keep the cans from touching each other or the bottom of the boiler. Fill with water, letting it come over the tops of the cans. Boil three hours. I should fill in boiling water from the teakettle if the tops get exposed from the evaporation of the water. Take the boiler off, and when it is cool enough to handle take out the cans, screwing the tops down still more if possible. The corn is better than any we buy.

There are more grasshoppers here this year than last, but the late spring and frequent rains have kept them in check, and they are not doing as much damage. Still the summer is not over and crops not safe from them yet.

HULDAH PERKINS.

Pioneer.

#### MINCED VEAL.

Take some cold roast veal, cut it into slices, and mince it very fine with a chopping-knife. Season it to taste with pepper, salt and sage rubbed very fine, grated lemon peel and nutmeg. Put the bones and trimmings into a stew pan with a little water, more than enough to well cover them, and simmer over hot coals to extract all the gravy from them. Then put the minced veal into a stew pan, strain the gravy over it, add a piece of butter, the size of an egg, rolled in flour, and a little sweet milk, or cream, if you have it. Let all this simmer together till thoroughly warmed, but do not let it boil, lest the meat having been once cooked should become tasteless. When you serve it up, have ready some three-cornered pieces of bread toasted and buttered, place them all round the inside of a dish and pour in the hot stew.

Another way is to put the stew into a dish and cover the mince with a thick layer of grated bread, moistened with a little butter, and browned on the top with a red hot shovel, or you can put it in the oven for a few minutes. This must be eaten while very hot.

ILKA.

#### CONTRIBUTED RECIPES.

Icing.—One cup granulated sugar, white of one egg, one cup red raspberries. Beat all together with egg beater for ten minutes. Canned berries may be used by straining out all the juice.

GENEVA.

Pickled Cucumbers.—Select those about the size of the little finger. Soak in strong brine three days, then rinse, wipe and place in cans. Heat to boiling some good, strong vinegar, with a lump of alum size of hickory nut, to the gallon, dissolved in it; add spices to taste and pour over the cucumbers in the cans, sealing at once. A few pieces of horse radish root placed in the top of each can will prevent the vinegar from becoming moldy.

EXIT.

White Cake With Chocolate Icing.—One cup of sugar, one scant half cup butter, one-half cup sweet milk, the whites of two eggs, two teaspoonfuls of baking powder sifted into one and one-half cups of flour. Season with vanilla and stir in a little grated baker's chocolate.

Icing for the Cake.—One cup of sugar, one tablespoonful of cornstarch, one-half cup of cold water. Stir till dissolved, getting the lumps out of cornstarch, boil ten minutes, stirring constantly, take off of stove, add a

small piece of butter and stir till cool and spread over the cake. Melt one-fourth of a bar of baker's chocolate by cutting it into small pieces (put it into a saucer over the teakettle to melt), and spread over the white icing quickly.

Fruit Salad.—Beat the yolks of four eggs until very thick and light, then beat into them gradually one cup of sifted powdered sugar and half a level teaspoonful of salt. Beat until sugar is dissolved. Add the juice of two lemons and beat again. Peel and slice thin six bananas and four oranges. Put into deep dish a layer of bananas, then again a layer of each, with bananas on top, and put remainder of dressing over it. Set on ice and serve very cold.

Lemon Pudding.—One large lemon grated, one coffee cup of grated bread, one coffee cup of sugar, one heaping tablespoonful of cornstarch, piece of butter size of a walnut, yolks of two eggs, two coffee cups of cold water. Bake three-quarters of an hour. Take whites of the two eggs, beat thoroughly, add two tablespoonfuls of sugar, put on top and brown in the oven.

Chocolate Pudding.—Boil one pint of milk, then add one cup of sugar, two tablespoonfuls of grated chocolate and two heaping tablespoonfuls of cornstarch. Boil until thick and pour into a mould. Serve with sugar and cream, flavored with vanilla.

M. E. S.

Mr. Morris.  
To Prepare Citron for Cake.—Slice the citron and quarter the slices if very large, or if not third them. Take out seeds and steam the pieces until tender. Let stand awhile and drain off the water which runs out of them. Weigh the fruit and allow two-thirds of a pound of sugar to each pound of it. Cook in the sugar very carefully until clear. Drain off the syrup and spread citron on plates, covering the pieces with granulated sugar, keeping them warm until candied. Keep in glass cans to prevent drying.

JENNIE.

#### HOUSEHOLD HINTS.

Bathing the feet, giving them a brisk rub with a coarse towel, then dressing them with fresh shoes and stockings, will rest one wonderfully when tired.

For sore or inflamed eyes try sweet spirits of nitre, diluted with an equal quantity of water. Wet cloths with this and place upon the eyes, changing frequently.

Look out for the kitchen drain this hot weather. Let no odors assail the nostrils about the back door. Ashes, always at hand, will deodorize bad smells, cleansing and purifying cesspools, or any places where water has been allowed to stand. If the drain pipe gives off an offensive odor pour copperas water down it. If there is no underground drain use pails to empty kitchen and wash slops into and carry them off, emptying each time in a different place.

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To women, young or old, rich or poor, Mrs. Pinkham, of Lynn, Mass., extends her invitation of free advice. Oh, women! do not let your lives be sacrificed when a word from Mrs. Pinkham, at the first approach of weakness, may fill your future years with healthy joy.

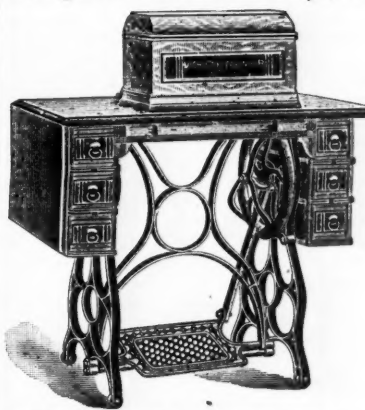
Mrs. A. C. BUEHLER, 1123 North Albany avenue, near Humboldt Park, Chicago, Ill., says: "I am fifty-one years old and have had twelve children, and my youngest is eight years old. I have been suffering for some time with a terrible weakness; that bearing-down feeling was dreadful, and I could not walk any distance. I began the use of Lydia E. Pinkham's Vegetable Compound and Sanative Wash and they have cured me. I cannot praise your medicine enough."



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## Legal Department.

CONDUCTED BY EARL D. BABST,  
56 Moffat Building, Detroit.

Printed Forms for Contract with Labor.—M. N., Menominee, Mich.—There is no printed form that we are aware of. Special contracts are prepared to meet special circumstances.

Settling Up Affairs of Old Society.—C. W. L., Dearborn, Mich.—Please forward copy of articles of association or incorporation, also by-laws of society. Society's affairs may be settled up, but the method depends on the particular facts.

Year of Redemption Runs From Date of Foreclosure Sale—Right to Crop.—Subscriber, Kalamazoo, Mich.—1. S. bought a farm on December 12, 1896, at mortgage sale. When does year of redemption expire?—Year runs from date of sale, consequently right of redemption ceases on December 11, 1897. 2. Who has a right to put in the crops this fall and cut the second crop of hay now growing on the land?—The mortgagor has the right to harvest all crops matured up to the day of expiration of redemption, when all his interest and right ceases. Crops sown this fall and matured next autumn would belong to mortgagee, or purchaser, S., for it would be the mortgagor's folly to sow what he knows he may not reap. Hay now growing may be cut by mortgagor any time before December 12, 1897.

Protection of Stallion Owner—Effect of Mortgage—Effect of Sale.—W. B. G., Plymouth, Mich.—1. A breeds his mare, on which B. has a mortgage. Can owner of stallion foreclose his lien, which has been duly filed, and hold the foal?—If the owner of the stallion had notice of the mortgage, either directly or because the mortgage was filed, the lien would be valid, subject, however, to the mortgage. If the mortgage was not filed, and the owner of the stallion had no notice of same, his lien would come before the mortgage. 2. E. breeds his mare to C's stallion, and afterwards sells the mare to F. In due time C. files a lien on prospective foal. Is lien good?—The lien is not good against the foal unless filed before the sale of the mare to F., or unless F. had notice that C. claimed a lien on foal for services of stallion. C. can sue E. in assumpsit. See answer to G. A. B., this department.

Wife's Liability for Debt of Husband.—Subscriber, Ottawa Co., Mich.—If A. trades property for B. and takes B's note for his commission, and asks B's wife to sign as surety, is the property she inherits later on liable for said note?—No. The note would only bind the husband. A wife can only contract and bind herself and estate already possessed. The test of a wife's competency to contract is, does the contract, or does it not, deal with her individual estate. It must appear affirmatively that it is within her power and that it relates or concerns her separate property; proof must always be given of such consideration as will bind her. In order to be valid her note must be based upon a consideration of it, or otherwise in relation to her separate estate. The same is true of her indorsements, and she cannot bind herself by promissory note or indorsement, whether made alone or jointly with others, if given merely for the purpose of paying or securing her husband's debt, except upon a sufficient consideration paid to her for so doing.

Ownership of Fruit—Overhanging Branches—How Abated.—M. B., New Hudson, Mich.—1. A. and B. join lots. A. has a row of fruit trees which overhang B's lot. To whom does the overhanging fruit belong?—The fruit belongs to A., the owner of the trunk of the tree. Even though the fruit falls from the overhanging branches upon B's land, the owner of the trees (A) may go upon the land and take it away without being liable for trespass. 2. Can B. compel A. to cut the overhanging branches? If so, how? If A. does not cut them off can B. do so?—Permitting branches of trees to extend over the soil of another is said to be an unequivocal act of negligence, warranting the party injured in abating the nuisance by clipping the branches. He cannot destroy the tree, for that belongs wholly to him on whose land it grows, nor can he cut the branches back further than to the

line. B. may also sue for damages, but must be able to show real damage. After clipping branches bearing fruit B. cannot convert them to his own use. They still belong to A.

Lien of Stallion Owner—When Defeated.—G. A. S., Jerome, Mich.—A. trades horses with B. A. asks B. if the mare is with foal; B. answers, "No." The mare proves to be with foal. Can the owner of the stallion collect service fees of present owner of mare?—No. Where one of two innocent parties must suffer by the fraud of another, he shall bear the loss who by his conduct has enabled such third party to perpetrate the fraud. The owner of the stallion had it within his power to protect himself under Act 280, Laws of 1887, which provides that the owner or keeper of a stallion shall, after demand upon the owner of the mare for the price agreed upon for service, have a lien upon the get of such stallion for the period of six months after the birth of the foal, for the payment of the services of such stallion. In order, however, to perfect such lien, he must file with the township clerk in the town where such dam is owned the agreement, or a true copy of such agreement, entered into by the owner of the dam for such service, together with such description of the dam as to age, color, or other marks as the person filing same is able to give. This filing is to operate, under the provisions of this act, as a chattel mortgage, and may be enforced in the same way. From the statement of the question it does not appear that such steps were taken, and this opinion is based on such assumption. A. must be regarded as a bona fide purchaser and owner of the mare; and, the title and ownership of the foal following the dam, he is the rightful owner of the foal. See opinion on similar statement elsewhere in this department.

## The Markets.

### WHEAT.

The market to-day (Thursday) has ruled firm and active at the high point reached on Wednesday. French reports were of a nature to set off all bear rumors, and the close was strong at Wednesday's prices. There is, however, a nervous feeling in the trade, many looking for some reaction after the steady advance of the past week. But receipts are very light throughout the northwest, while foreign purchases continue heavy, and the result may be a further advance instead of the expected decline. Liverpool advices are very strong, as are those from Paris.

The following table exhibits the daily closing sales of spot wheat in this market from July 26 to August 19, inclusive:

	No. 1	No. 2	No. 3
	White.	Red.	Red.
July 26.....	74 1/2	74 1/2	72 1/2
" 27.....	76	76	73 1/2
" 28.....	75 1/2	75 1/2	72 1/2
" 29.....	75 1/2	75 1/2	72 1/2
" 30.....	77 1/2	77 1/2	74 1/2
" 31.....	77 1/2	77 1/2	75
Aug. 1.....	75 1/2	75 1/2	76 1/2
" 2.....	80 1/2	80 1/2	78
" 3.....	82 1/2	82 1/2	80 1/2
" 4.....	79 1/2	79 1/2	77 1/2
" 5.....	81 1/2	81 1/2	79 1/2
" 6.....	80 1/2	80 1/2	78 1/2
" 7.....	81 1/2	81 1/2	79 1/2
" 8.....	83	83	80 1/2
" 9.....	85 1/2	85 1/2	82 1/2
" 10.....	87 1/2	87 1/2	84
" 11.....	86	86	84
" 12.....	87 1/2	87 1/2	85 1/2
" 13.....	88 1/2	88 1/2	86 1/2
" 14.....	89 1/2	89 1/2	87 1/2
" 15.....	87 1/2	87 1/2	85 1/2
" 16.....	91	91	89
" 17.....	91	91	89
" 18.....	91	91	89
" 19.....	91	91	89

The following is a record of the closing prices on the various deals in futures each day during the past week:

	Aug.	Sept.	Dec.
Friday.....	86	85 1/2	85 1/2
Saturday.....	87 1/2	87 1/2	88 1/2
Monday.....	89 1/2	89 1/2	89 1/2
Tuesday.....	87 1/2	87 1/2	88 1/2
Wednesday.....	91	91	91 1/2
Thursday.....	91	91	91 1/2

The visible supply of wheat in the United States and Canada on Saturday last was 17,226,000 bu., as compared with 45,876,000 bu. at the same date a year ago. As compared with the previous week, the visible supply shows a decrease of 424,000 bu. One hundred sacks of a half-bushel capacity have been ordered by the Detroit Board of Trade, in which samples of Michigan grain will be sent to all the leading foreign and domestic markets. This is something new and is expected to bring some foreign trade here direct. Detroit millers are running their plants day and night at their full capacity, but cannot keep up with their orders for flour. The recent advance in wheat has done a great deal for the flour trade.

The Great Northern Railroad crop report shows that in the southwestern quarter of Minnesota grain is practically all right and will yield a good average crop. The southwestern quarter of Wisconsin is not in as good condition and will not have over an average crop. Conditions generally good. In many sections the yield will be less than 15 bu. an acre, but the general yield will be between 15 and 18 bu. South Dakota is in fine condition. North Dakota's average will be from 10 to 25 bu. A spring wheat crop of 150,000,000 to 160,000,000 bu. in Minnesota and the Dakotas, with 60,000,000 to 70,000,000 bu. in other

spring wheat territory, seems a reasonable expectation at this date.—Chicago Times-Herald.

A New York dispatch received last week says: "The most interesting incident of the day in the wheat market was an order received by a firm from the heart of Switzerland for 10,000 quintals (10 tons) of hard red No. 1 Manitoba wheat, America's best grade. The order was small, but it fully exhibited the strait of France, which has always supplied Switzerland with wheat. During the week this firm has booked orders for over 1,000,000 bu. of wheat for France. An order for 200,000 bu. November delivery for that country was received Friday."

A Bulgarian paper publishes the following report from a well-known grain exporter: "Condition of the wheat ears between Nicolopol and Plevna indicates a loss of two-thirds compared with last year, but on the higher grounds the yield may reach half of last year's crop. The quality is poor, the grain being small and shrunken. Of the 44,000,000 bu. harvested last year nearly 24,000,000 bu. were exported. If, therefore, the present crop is only half of last year's, there will be nothing for export what may be left from last year's crop, unless the people eat corn in lieu of wheat."

According to the special cablegram from Broomhall's Corn Trade News, Liverpool, to the Daily Trade Bulletin, the European supplies of breadstuffs were reduced 12,300,000 bu. during the month of July, against a reduction of 5,200,000 bu. in June and 13,400,000 bu. during July, 1896. The aggregate supplies in all positions on August 1 were only 35,000,000 bu.—the smallest reported in many years against 50,300,000 bu. on July 1 and 48,000,000 bu. on August 1, 1896.

Beerbohm is advancing his estimate of European wheat requirements weekly. All right. Just name the quantity you require. We are in the "order-filling" business, and statisticians are running plants in Oklahoma, Iowa, Nebraska and Washington prepared to fill them—the larger the better.—Chicago Trade Bulletin.

### DAIRY PRODUCTS.

#### BUTTER.

The demand for good butter is in advance of the supply and everything offering is taken quickly if of good quality. The consequence is that really choice butter sells in advance of quotations furnished by the trade. This is especially so in the case of extra fine dairy. Quotations range as follows: Creamery, 16@17c; fancy dairy, 13@14c; good dairy, 11@12c; low grades, 7@9c. At Chicago there has been a sharp advance in the finer grades, and the market is so firm at the advance that a further appreciation in values would not be surprising. Quotations in that market on Thursday were as follows: Creameries, extras, 16@17c; firsts, 15@16c; seconds, 11@13c. Dairies, Extras, 14c; firsts, 11@12c; seconds, 10c. Packing stock, fresh, 9c. The New York market has also advanced, and the Tribune, in its weekly review, says: "Arrivals have shown further considerable falling off. All other markets have been on the upward turn and the demand here has shown considerable force, many buyers being anxious to secure stock ahead of current requirements. With these conditions existing it has been very easy to advance prices. The first advance was to 15 1/2c on extra creamery, then to 16c, and to-day 16 1/2c became well established, the feeling being decidedly firm at that." Quotations in that market on Thursday were as follows: Creamery, western extras, per lb. 16c; do firsts, 15@15 1/2c; do thirds to seconds, 11@14c; do State, extras, 16@16 1/2c; do thirds to firsts, 11@13 1/2c; State dairy, half-firkin tubs, extras, 14 1/2c@15c; do Welsh tubs, fancy, 14@14 1/2c; dairy tubs, thirds to firsts, 10@13c; State dairy, tins, etc., 10@12 1/2c; imitation creamery, best, 12@12 1/2c; do seconds to firsts, 9 1/2c@11c; factory, June extras, 10 1/2c@10 3/4c; do firsts, 10c; do current packed, firsts, 9 1/2c@10c; do thirds to seconds, 5 1/2c@9c.

At the Utica Board on Monday 128 packages of creamery sold at 15@16c, bulk at last named price.

At Little Falls on Monday 32 packages of dairy butter sold at 14@15c.

#### CHEESE.

The markets are all strong and tending upwards, and the feeling is one of strength and confidence. In this market values show no change since a week ago, but there is a disposition to advance prices, and while quotations are nominally unchanged at 8 1/2c for the best full creams, 1/4c more has been realized in a few instances on extra nice lots. It looks, therefore, as if a further advance would take place within a few days. At Chicago there is less strength shown in the market than at the east, but that there will be a change in that market if others maintain their present strong condition, is very certain. Quotations in that market on Thursday were as follows: "Young Americas, 8@8 1/2c; twins, 7 1/4@7 1/2c; cheddars, 7@7 1/2c; Swiss, 8@8 1/2c; Limburger, 6@7c; brick, 6@7c. The New York market is firm and higher, and with a further advance abroad reported by cable this morning we look for a further appreciation in prices on this side of the Atlantic. The Tribune says in its market report: "Up to the close of last week the general price of fancy colored cheese was 8 1/2c, and fancy white 7 1/2c@8c, but anything showing defective quality has to be cut materially to attract attention of speculators and really nice cheese cleaned up at 7@7 1/2c, and more faulty lots from 6 1/2c@6 3/4c down to 6c. This week opened on Monday with a strong holding in view of the higher price paid in the country, with receivers generally disposed to ask 8 1/2c@8 3/4c for fancy colored, and 8 1/2c@8 3/4c for white." Quotations in that market on Thursday were as follows: State, full cream, large, fancy, colored, 8 1/2c; do white, 8 1/2c@8 3/4c; do choice, 8 1/2c@8 3/4c; do fair to good, 7 1/2c@8c; do common, 6 1/2c@7 1/2c; do small, colored, fancy, 9c; do white, 8 1/2c@8 3/4c; do choice, 8c; do fair to good, 7 1/2c@7 3/4c; light skims, choice, 5 1/2c@6c; part skims, choice, 5 1/2c@5 3/4c; do good to prime, 4 1/2c@5c; do common to fair, 3 1/2c@4c; full skims, 2@3c. At the Utica Board on Monday 7,729 boxes were sold at a range of 7 1/2c@8 1/2c; the previous week 9,250 boxes were sold at a range of 7 1/2c@8c; and on the same day

a year ago 8,033 boxes were sold at an average price of 6 1/2c@7 1/2c.

At Little Falls on Monday 6,678 boxes were sold at a range of 7 1/2c@8 1/2c. The previous week 6,712 boxes were sold at a range of 7 1/2c@7 3/4c.

At Liverpool on Thursday the finest white and colored American cheese sold at 42s per cwt; the previous week quotations were 41s, showing an advance of 1s per cwt since our last report. Market quoted firm at the advance.

### DETROIT PRODUCE MARKET.

Detroit, August 19, 1897.

FLOUR—Quotations on jobbers' lots in barrels are as follows:

Straights ..... \$4.50@4.75  
Clears ..... 4.25@4.50  
Patent Michigan ..... 5.00@5.25  
Low grade ..... 3.75@3.85  
Rye ..... 3.00

CORN—Mixed quoted at 29@30c; No 2 yellow, 31c; No 3 yellow, 30 1/2c; No 3 white, 30 1/2c per bu.

OATS—No 2 white, selling at 21c; No 3 white, 19 1/2c; light mixed, 20c per bu. RYE—No 2 quoted at 48@48 1/2c per bu.

Market firm. CLOVER SEED—Prime for October delivery is selling at \$4.27 1/2c per bu.

FEED—Quoted as follows: Bran and coarse middlings, \$9; fine middlings, \$12; coarse corn meal, \$12; cracked corn, \$12; corn and oat chop, \$10 per ton. Market firm.

BUTTER—Quoted as follows: Creamery, 16@17c; choice dairy, 13@14c; fair to good dairy, 11@12c; ordinary grades, 6@9c per lb.

EGGS—Regular receipts, 13@13 1/2c per doz.

BEANS—City hand-picked, 90@95c per bu in car lots; unpicked, 50@60c per bu.

POULTRY—Spring chickens, 10c; fowls, 8c; ducks, 7@8c; turkeys, 8c per lb.

APPLES—New, \$2@2.50 per bbl for good stock.

PLUMS—60@65c per 12-quart basket of Damsons.

GRAPES—Concord and Niagaras, 20@25c per basket.

BERRIES—Blackberries, \$1.75@2; huckleberries, \$2.25@2.50.

PEARS—Bartlett's, \$1 per 12-qt basket; common, 75c@81c per bu.

PEACHES—Michigan, small baskets, 25@30c; Georgia, 6-basket crate, white, \$2; 6-basket crate, yellow, \$2@2.25; Missouri, white, 4-basket crate, 75c; frees, one-third bu box, 60c.

CABBAGES—Quoted at 85c@91c per bbl crate.

DRIED FRUITS—Evaporated apples, 4 1/2c@5c; evaporated peaches, 7 1/2c; dried apples, 3c per lb.

HONEY—Quoted at 10@12c in sections for white, and 8@9c for dark comb; extracted, 5@6c per lb.

PROVISIONS—Mess pork, \$9.00 per bbl; short cut mess, \$10; short clear, \$9.75; pound lard, 4 1/2c; family lard, 4 1/2c; kettle lard, 5 1/2c; smoked hams, 9 1/2c@10 1/2c; bacon, 7 1/2c@8c; shoulders, 6 1/2c; picnic hams, 7 1/2c; extra mess beef, \$7.50; plate beef, \$8.

COFFEE—City prices are as follows: Rio, 15c; fair, 16c; good, 18@19c; prime, 20c; choice, 22@23c; fancy, 24c; Maracabo, roasted, 25c; Santos, roasted, 24c; Mocha, roasted, 23c; Java, 23c.

HARDWARE—Wire nails, \$1.50; steel cut nails, \$1.50 per cwt, new card; axes, single bit, 35c; double bit, 40c; \$3.50; single bit, solid steel, \$6; double bit, solid steel, \$9.50 per doz; bar iron, \$1.40; carriage bolts, 75c per cent off list; tire bolts, 70c and 10c per cent off list; painted barb wire, \$1.90; galvanized do, \$1.90 per cwt; single and double strength glass, 60 and 20 per cent off list; sheet iron, No. 24, \$2.50 per cwt; galvanized, 75 and 10 per cent off list; No. 1 annealed wire, \$1.35 rates.

OILS—Raw linseed, 40c; boiled linseed, 42c per gal, less 1c for cash in ten days; extra lard oil, 40c; No. 1 lard oil, 31c; water white kerosene, 8 1/2c; fancy grade, 11 1/2c; deodorized stove gasoline, 7 1/2c; turpentine, 34c per gal in bbl lots; in less quantities, 40@42c.

HAY—Best timothy in car lots, \$8@8.50 per ton; rye straw, \$5.50; wheat and oat straw, \$4.50 per ton.

HIDES—No 1 green, 6c; No 1 cured, 7c; No 2 green, 5c; No 2 cured, 6c; No 1 cured calf, 8c; No 2 cured calf, 6 1/2c; No 1 green calf, 8c; No 2 green calf, 6 1/2c per lb; sheepskins, 60@80c each.

WOOL—Unwashed fine, 13 1/2c@14 1/2c; unwashed medium, 17@18c; washed fine, 17@18c; washed medium, 21@22c per lb.

### DETROIT LIVE STOCK MARKET.

#### Michigan Central Stock Yards.

Detroit, Mich., August 19, 1897.

#### CATTLE.

Thursday's receipts of cattle numbered 547 head; through and direct to butchers, 229; on sale, 318; as compared with 752 one week ago. There is no improvement to note in quality; very few good heifers. With the light receipts trade was active and prices 15 to 25c higher than one week ago. \$4.25 was the highest price paid for 8 steers av 1,116 lbs, but the bulk changed hands at prices ranging from \$3.00 to \$4.00; old cows and common thin butchers, \$2@2.75; bulls, good shippers, \$3.25@3.50; light to good butchers, \$2.50@3; stockers in good demand at \$3.15@3.75; feeders, \$3.50@4. Veal calves, receipts 104 head; one week ago, 149; active and higher; sales at \$5.00 to \$6.00 per 100 lbs. Milch cows and springers active; sales at \$23.00 to \$50.00 each, mostly \$30.00 to \$40.00.

Thompson sold Mich Beef Co 6 stockers av 596 at \$3.75 and 2 common cows av \$10 at \$2.20, 3 mixed butchers av \$70 at \$3.35 and a cow to Regan weighing 880 at \$2.65. Bunnell sold Sullivan a fat bull weighing 1,520 at \$3.25, 1 do weighing 790 at \$3.00 and 3 feeders av 903 at \$3.30; also 2 fat heifers to Fitzpatrick av 825 at \$3.70.

Clark & Belhimer sold Sullivan 4 stockers av 649 at \$3.65, 2 fat heifers to Black av 785 at \$3.65, a fat cow weighing 1,210 at \$3.00.

F. Culver sold Russell a fat heifer weighing 1,070 at \$4.15.

Bergan & Terhune sold Black 11 good butcher steers av \$19 at \$4.00, 5 do heifers av 706 at \$4.00 and 3 fair butcher cows av 1,140 at \$3.75.

Roe & Holmes sold Lovewell 4 stockers



**ALEXANDER FURNACE & MFG. CO.,**  
**LANSING, MICH.**



## Horticultural.

### PEAR BLIGHT.

Prof. L. R. Taft, Lansing, Mich.:

Can you give any remedy for pear blight? I have it on my trees. I cut back the limbs but still they dry and the leaves turn black. Is there any remedy for it? And what can I do for it? Please answer soon through the Michigan Farmer, of which I am a subscriber.

Gratiot Co., Mich.

M. P. HALSTED.

The only remedy for pear blight is to cut off and burn the portion in which the disease has appeared, taking care to make the cut a foot or so below where the disease shows. What is commonly called pear blight is the result of fermentation going on in the tissues and if it has started at only one point its spread can be stopped by the prompt removal of the infected portions, but as the contagion has generally extended several inches below where its presence can be noticed, the above rule should not be neglected. The disease often appears upon several branches at the same time, and even after all infected portions have been cut off it may reappear elsewhere if the conditions are favorable, and nothing can be done to save a branch that is attacked. While it can not be stated as a positive fact, it is probable that if all parts of the tree can be kept covered with Bordeaux mixture or some other effective fungicide, the entrance of the germs of the disease can be prevented. The germs enter through cracks in the bark due to sun or frost, through the flowers, and the leaves and shoots while soft and succulent. By observing the following rules the danger of injury from pear blight will be lessened: Select varieties that make a short firm growth and are not likely to be injured by the winter; avoid planting pears upon soil very rich in nitrogen, and the excessive use of nitrogenous manures; cultivate so as to avoid a late growth and sow some cover crop about the middle of August; spray the trees with Bordeaux mixture at intervals of two to four weeks from May until July; promptly remove the blighted portions as soon as they are noticed.

L. R. TAFT.

Agricultural College, August 7, 1897.

### HORTICULTURE IN 1836 AND 1896.

Judge Miller, of Missouri, a correspondent of the Rural World, in a recent article compared the conditions of horticulture in the United States in 1836 with those prevailing in 1896. Many of our older readers will recall some of the milestones in horticultural progress referred to by Judge Miller, from whose article we take the following extracts:

Within the last century there have been more inventions and greater advances made in the arts and sciences than in any former period of the same length of time in the history of this globe. Horticulture has kept pace with these and is today more advanced than ever before. Sixty years ago the word horticulture was hardly mentioned. Now it stands next to grain raising in importance—not only in the pleasures and comfort that it gives to the human family, but also in a commercial point of view.

To go back three-score years seems a long look to the rear; yet that is what some of us can do, and remember well the condition of our fruits, and compare them with those of the present day. Then about all the strawberries we saw were found in meadows and fence corners, small but high-flavored. Now we have more than 100 varieties—large, luscious ones in abundance.

One might be safe in stating that there is now a car load of strawberries grown to every quart grown then. I remember when they were first taken to market in buckets and baskets, and were measured out in tin quart measures. Now they are put up in neat quart boxes, shipped in crates of twenty-four and thirty-two quarts each, all over the country.

Then the black-cap raspberries were chiefly gathered in old clearings, strung on a stem of timothy and carried home in that way. Now the improved varieties are planted by the 100 acres. The only red ones then were what we called Purple Cane and the Red Antwerp,

Now the varieties can be named by scores.

Blackberries were all wild and the planting of them in gardens was not thought of. Now hundreds of plantations, large and small, can be seen all over the country. Currants were then the white and red Dutch (and they are still grown). Now we can count the varieties by the dozens.

Cherries, the Mayduke, Oxheart and Bleeding Heart were the improved varieties. The English Morello was a way-side tree. The Black Morello was common, but nearly abandoned on account of the black knot. Of the Mazzard, a black and red, there were trees sixty feet high, and three feet in diameter at the base, and trees that would bear a two-horse wagon load in a season. These were small, however, and by no means choice. Now we have a hundred varieties of select fruit of these.

Peaches.—Early York was then the earliest we had of budded trees, but plenty of good seedlings. The Early York ripened in August and was the earliest. Now we have a host of varieties, ripening from June until November.

Grapes.—The Alexander was the pioneer; then Isabella and Catawba, soon followed by the famous Concord, from which has descended a host of valuable varieties, both white and black. The Martha was the first seedling from it that became famous. It was sold to Mr. Knox, of Pittsburg, Pa. Since then other white ones from it and from the Concord have crowded it out in a measure. Apricots we had growing on the terraces, but they seldom bore fruit. Prunes and plums we had a few, but the main crop of plums was from the native wild trees. Now, orchards of ten acres of Wild Goose alone are planted.

Pears.—We then had mostly seedling, and of very ordinary quality. Now we have double the number of varieties, which can be in eating nearly the whole year. Apples were then grown mostly for home use, and there were but few varieties compared with the legion we now have.

But to refute the idea that fruits run out, I will state that the Rambo, Red Romanite, Prince's Harvest, Winesap, Newton Pippin and Yellow Belleflower that have been grown for 100 years still hold their place in every good collection. But what a multitude of new and valuable ones have been produced since then, and still they come.

Then each farmer raised principally for his own use and to sell in the towns near him. Now tens of thousands of acres are planted, and it gives railroads considerable work hauling them to their destinations, and mighty steamers to transport the fruit to foreign countries (3,000,000 barrels in 1895).

Then California was a Mexican state, and its future greatness as a fruit country was not dreamed of. Now she sends train loads of it across the Rocky Mountains to the East, and her grapes and wine to foreign lands. It is to-day the greatest fruit country on the globe.

Next comes Missouri, my adopted state, of which I am proud, and why not when she was admitted into the Union the same year that I was first allowed to breathe the air of this great Republic? May the good work of horticultural progress go on, and the time come when every man, woman and child will have all the choice fruit they need; a condition that at this time does not exist, for not one man in ten who owns land enjoys what he might if he possessed the true spirit and love of horticulture.

### CELERY CULTURE FOR THE FAMILY GROWER.

John Rhodes, in a bulletin of the Wisconsin Horticultural Society, gives his methods of cultivating celery on a small scale. He says the suggestions are not intended for the commercial grower, but for the home gardener, and continues: Celery prefers a deep black loam, which retains moisture well, but sufficiently drained to prevent saturation. As to varieties, individual taste should be the guide. My choice would be the Giant Pascal or Golden Heart. Having patronized seedsmen to the extent of finding something which suits, my advice would be to grow your own seeds. After eating the tops the seeds may be wintered in the cellar as easily as potatoes. These roots planted the following spring will bear seed abundantly, which if dried before freezing and kept dry will surely grow, and if no other variety has been grown near

it, will be true to name. If more seed is grown than needed, it can be put through a coffee mill and used for flavoring soups, meats, etc. Our plan is to sow seed quite thick in drills and do no transplanting, but thin out, when an inch or two high, to six inches apart. The seed is quite slow to germinate and should be sowed shallow. We usually draw a line, mark along the line with the hoe handle, sow seed and rake it in. Thorough cultivation through the summer is necessary, keeping an earth mulch on the surface to conserve moisture. When the plants are eight or ten inches high, blanching may be commenced. This can be done with boards set on edge, earth heaped around it, four-inch tile slipped over it or common butchers' paper wrapped around it and tied with string—main principle being exclusion of light; the leaves should be compressed to prevent earth falling in the center or crown of plant. During the growing season the leaves should not be entirely buried. One of my experiments was to use two-foot tile instead of one foot, slipped over small plants, in the hope that the leaf stalks would grow out of the tile two feet long and beautifully blanched. After gazing in to the tile at short intervals for two or three weeks, I thought the plants seemed to be growing down. Lifting off the tile to investigate, every plant was found dead. Verdict, died of imprisonment! Would prefer fence boards set on edge each side of row some three or four inches apart, held in place by stakes outside the boards. Tie stakes opposite each other, at the top a foot or more above first boards, and fill between the boards around celery with earth, confining the leaves with one hand and shoveling earth with the other. As the celery grows, more boards may be slipped between the stakes over the first boards and filled in with earth as before. The best time to eat celery is as soon as it is large enough. Not every one is born with a celery appetite, however. My first attempt to eat the vegetable required the fortitude which we pray for when obliged to take a dose of castor oil. But public opinion, science and medical authority, had declared the aromatic herb to be palatable and healthful, therefore should it go down even if a ramrod be used in the process. Its taste daily grew more civilized and agreeable. The rest of the family took to it as easily as young ducks to water. The children are now wide apart and have homes of their own, but if they come to us in autumn or early winter, they will have crisp celery to remind them of joyous childhood and buoyant youth. The plants will not stand much freezing and for winter use should be carried down cellar and planted in boxes, with plenty of soil adhering to roots and filled between, watering as needed through a funnel or hose to keep tops dry.

### FRUIT PROSPECTS IN MISSOURI.

L. A. Goodman, Secretary of the Missouri State Horticultural Society, sends us the following on the fruit prospects in that state under date of August 15th:

The fruit prospect for the year 1897 has been thus far a grand, good one and the fruit yet to ripen promises an abundant yield as well as profitable returns. Especially is this true of the apple crop for packing.

Reports from nearly every county of the state give the crop ranging from 50 per cent to 100 per cent, making an average of about 75 per cent for the state. Some of the orchards, which had such a heavy crop last year, of course, will not be so full, but there are thousands of young orchards all over the state that are just beginning to bear and the crop is not only a good one, but the apples will be extra fine and very perfect.

The southern part of the state, notably the southwest, shows the greatest per cent, 80 to 90, and the apples are nearly free from blemishes.

The central portion south of the river will also have a large surplus of good fruit, because there are many more and older orchards in bearing. Car loads can be secured at almost any of the apple stations in this district. Very many of the large young orchards are in bearing this year and the apples are fine. Prospects 65 to 75 per cent.

The central portion north of the river, especially the western part of it, will also have a good crop, although the orchards having the largest crops are somewhat scattered because of the large crops of last year on some of them. But there are so many good orchards in this scope of country that

thousands of barrels can be secured at almost any of the larger places. Prospects 70 to 80 per cent.

The northern portion, especially the northwest, is notably a good apple district and the apple orchards planted during the last ten years are beginning to bear. Here also thousands of barrels can be secured and the prospect ranges from 75 to 85 per cent.

These estimates are as near as can be given without itemizing more closely, and they are to be taken as a whole, not as the facts in any one location, for sometimes one location in a county is extraordinary good and another poor because of local causes. Very many orchardists, that have reported, have given 100 as their crop, while others report as low as 40.

While Missouri and North Arkansas and Eastern Kansas will have an abundant and a very perfect crop of apples, yet we must not lose sight of the fact that the crop in the East will be a very short one, and the prospects for good, fair paying prices is flattering.

A trip made through Southern Michigan, Northern Ohio and Indiana and reliable reports from Western New York and other states have firmly convinced me that there is a great shortage in the apple crop of the East and it well behooves us to make the best of the opportunity to get fair prices.

The grape crop will be so abundant that we cannot expect anything but low prices.

### LESSONS OF 1896 IN PEACH CULTURE.

Paper read by W. A. Smith, of Benton Harbor, before the West Michigan Horticultural Society.

To live and learn are among the most important considerations of humanity. Surely no one, whatever his occupation may be, has greater need of exercise in this direction than the horticulturist. New fruits are continually being brought to our notice and proclaimed as of superior quality, and many of the old varieties, a long time in cultivation, are no longer desirable, either for home use or for market purposes. Our experience of '96 in peach culture is most conclusive evidence that what is known as the early semiclingstone fruit is no longer valuable fruit to grow for market. In fact, those peaches never have been such. Cultivation of the peach is now so widely distributed over so large an expanse of country, and through so many zones of latitude, and the transportation facilities so rapid and perfect, that it matters little where the business is located, the markets are relatively near at hand; and when our Michigan early clingstone fruit gets upon the market, it comes into competition, with a better class of fruit from a more southern latitude, and has for many years been condemned, and has had to be sold at a sacrifice. Occasionally, as in '95, when the southern crop was partially cut off, these peaches sell more readily than common, but this was a rare instance. In former years, Hale's Early was our first peach to ripen, and this is still among our best early peaches, though not so early as some other varieties. Whether from climatic causes or from the virgin conditions of the soil in which it was grown, or from the depredation of insect enemies, this variety was subject to rot on the tree, even before maturity, and was known and quoted in the Chicago market as Hale's rot. The lesson of '96 was very conclusive on this point, viz: that in the long run we cannot afford to grow that kind of fruit for commercial purposes.

The year '96, will long be remembered as one of the most prolific fruit seasons in the history of this country. The pear, among large fruits, alone was lacking. Still, there are those who claim that there was no over-production, and never can be, but it was all owing to under-consumption. The same may be said to-day in relation to potatoes, that are sold on the market for six, eight and ten cents per bushel, and yet we know that every family in the land is revelling in the potato-dish two or three times a day; and notwithstanding the low price and glut of our western potato market, the people in New York and other eastern markets are feasting on tubers grown on the mucky lands of Ireland and Scotland. In the case of the peach, perhaps the inability to purchase has more to do in the matter of glut than the capacity to consume. I think that before the record of '97 is made up, people will discover that it will require a larger dollar to buy a bushel of peaches than it did in '96.

One of the most important lessons of '96, to the peach-grower, was the



necessity for a wider and more systematic mode of distribution. Michigan peaches in '96 were distributed over a much larger area than ever before. Refrigerating cars will carry our fruit successfully anywhere between the Mississippi on the west and the Atlantic seaboard on the east. This was accomplished in '96, notwithstanding the immense glut all over the country.

Another lesson will long be remembered, viz: that the more abundant the fruit, and consequently the lower the price, the more we had to pay for the give-away packages. The dealer in this kind of goods was quick to see the handwriting on the wall, and he went for the grower accordingly; and between the manufacturers and the transportation companies, the profits were pretty closely sliced down. The many, many lessons we have had on this point should by this time convince us that a larger and more uniform package would largely reduce our outlay and increase our income. Strange, strange as it may seem, we adhere year after year to these small packages, to our utter loss and to the profit of others who fatten upon our toil. Think of these little mites of baskets, five-pound and six-pound baskets alone costing about fifty per cent of the gross sale.

In the berry business, too, we cut off our own noses by adhering to the "snide" boxes, and the sixteen-quart case instead of using the twenty-four or thirty-two full-quart package. This is not a new lesson, but it will be reserved for our children to become wiser than we.

Another lesson, perhaps, never so strongly presented before, was that of thinning the fruit on the trees. This was so apparent that even a blind man could not help seeing the indispensable necessity of this work; and yet, how many growers utterly neglected to do this work. This was excused on the ground of economy. The practice of this economy, however, cost the peach growers of Michigan, in '96, tens of thousands of dollars, and was therefore a lesson that should long be remembered. Yet, it is safe to say, it is one that will soon be forgotten. The heavy draft on the trees of such an immense amount of fruit, was enough to tax their very life, to say nothing of the heavy drain upon the soil to mature so large a crop of solid matter in the shape of pits or seed.

When we stop to consider the immense amount of labor necessary to harvest this large crop of small and inferior fruit, the cost of the diminutive "snide" packages—five to six-pound baskets—the freight and cartage and the frequent cases of dishonest packing, is it any wonder that the growers' purse remained empty? But even those who thinned their fruit (and here I claim no exemption for myself) lacked in moral courage or worldly wisdom.

In California this matter of thinning peaches is reduced to a science. Their distant location from market absolutely demands this thorough work. Why not profit by their example? We know that Michigan peaches, equally well grown, and of higher color, are far superior in quality and will, side by side and day by day, outsell the California fruit. But not only did we lose heavily in '96, by keeping the markets glutted with our small, inferior fruit, but the loss will be seen and felt in '97. Our trees were so exhausted from the enormous burden of last year's crop, that they will demand one year's rest to recuperate, and they are likely to get it. Thus our ignorance, carelessness, or false economy will cause a double loss.

We have every reason to believe that the production of such an enormous crop of solids in the matter of pits must and will impoverish the soil. Our soils are no longer of the virgin type—constant removal of any crop must in time produce sterility and consequent poverty. Hence the question of fertilizing, after the exhausting crop of '96, is a matter of vital importance. The necessity of using fertilizers of some kind is generally admitted, but opinions differ in regard to the kind. Some would not use barnyard manure, yet this contains all the elements of plant food. Happily for the peach-grower, the forage plant known as crimson clover fills a long-felt want. While it is comparatively inexpensive, it will, I think, if properly managed, prove a veritable blessing to the fruit-grower. Instead of drawing all its plant-food from the soil, as most other crops do, it is claimed to receive most of its nitrogen, which is its principal element, from the air. A report was made some time ago in regard to the value of this crop, seeded down in the

spring and plowed under in the fall of the same year. This, upon analysis, indicated a value of \$18 per acre. The growth of this plant we know is not full and complete until the second summer, in this latitude about the first of June, when it is in full bloom, presenting a beautiful sight, its bright crimson blossoms over-topping the dark-green foliage below. A single root will sometimes support thirty-five and forty well-developed stems. If the young and immature plants, as stated above, are worth \$18 per acre, what would a mature crop be worth? Thus, by the addition of potash, in the application of wood ashes, which is a home product, and bone meal, we can restore and build up the fertility of our fruit lands, as well as farm lands in general.

Another lesson we learned in '96, was that in a year of great plenty and a heavy glut, the buyer becomes the chooser, and nothing but the best seems to satisfy his demands. The demand last year was for yellow-fleshed peaches. For awhile the demand of our buyers on the streets, to fill outside orders, was for "Yellow Crawfords," and almost any large yellow peach would readily sell as a Crawford. I think, everything else being equal, or even unequal, the yellow peach is more in favor than the white.

The prospect now, in our locality, for a peach crop in '97, is somewhat precarious. While some varieties have some showing of a crop, the greater part have little or none; besides, the curl is more general, it set in earlier than common, and bids fair to continue an indefinite time. This condition of the trees never fails to affect the fruit for the worse.

So, all in all, the prospect for peaches in our locality, and I think throughout the county of Berrien, is not flattering.

#### HORTICULTURAL NOTES.

W. B. Hall says he uses hard and soft coal ashes as a mulch for gooseberries, and finds that the bushes treated this way are in every respect superior to those not treated with the cinders. He intends using them on his currant bushes also.

A correspondent of the Country Gentleman says: "The cabbage maggot which causes the club-foot is making me a deal of trouble this year. I find it almost impossible to prevent or destroy the insect. I think about the best remedy is strong lime water applied around the roots. If this is used when the plants are small, and again in a few days, it will sometimes prevent the insect from doing much damage. To destroy the cabbage worm I have used Paris green in lime water. There can be no danger from poison in using this before the plants begin to head, as the rains will wash it all off, and then the edible part of the cabbage has not yet grown. After the heads are partly formed I should advise using hellebore or insect powder."

Concerning methods of keeping grapes, Consul-General Jones writes from Rome, Italy: "A recent bulletin of the School of Agriculture of Scandicci, Italy, describes experiments made by Professor Marchi for the keeping of grapes fresh during the winter. A certain quantity of grapes (comprising different qualities) were hung up in a cool and dry place, all damaged berries having been previously removed; a second lot was packed in dry, pulverized peat in wooden boxes. At the end of four months the grapes that had been hung up had become decayed and had dropped off; on the other hand, those that had been packed in the boxes were found to be in fine condition. This is, therefore, a simple and economical method. Another one consists in gathering the bunches with a good bit of stem attached and immersing their tips in bottles containing water and pulverized charcoal.

The old plan of burying, or putting cabbage in trenches during winter, or for winter use, has become obsolete, and a more simple and easy plan has been adopted. Where cabbage is grown on a large scale for shipping purposes, the best plan is to lift the cabbage and stack them two tiers deep and as closely as they can be placed in an orchard, or wood if convenient, and cover with leaves to the depth of two or three inches, the leaves to be kept in place by a slight covering of earth. In this way the heads will keep perfectly sound all winter, and they can be easily taken up as wanted for shipping. For family use cabbages can be kept in the same way, only it will not be necessary

to make the second layer. It is quite important to keep them a little below the freezing point. It has been suggested to keep them in some convenient building, but this plan has always resulted in failure, as the dry atmosphere is fatal; cabbage must be kept moist and cool, the slightest wilting renders it unfit for the table.—American Gardening.

A peculiar case came up before a judge in the County of Huron, Ont., in which the methods of a professional grafter were under examination. According to a report of the trial it appeared that Cooke, of Clinton, applied to Murdock, a farmer near Brucefield, to get grafting to do. Murdock asked his terms; Cooke said 5c a graft to insure, or 3c each, cash, and take your chance. Murdock said, go on; and Cooke grafted 34 trees, putting on, so he said, 3,400 grafts, at 3 cents each, \$102. Murdock was staggered, but paid \$20 on account, and then got some expert evidence, this evidence being that from 600 to 800 grafts were all that should have been put in. He, therefore, when sued, paid \$5 more into court, making \$25 with the sum previously paid Cooke, and fought it out. At the trial an armful of limbs from the orchard was brought into court, and it was shown that grafts had been put in decaying and broken limbs, and, in fact, everywhere a graft would stick, more for the purpose, as the judge said in dismissing the action, of running up a bill than for giving the best results in fruit. The judge said that the \$25 which Murdock had paid was enough, and dismissed the action with costs.

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## Grange Department.

Our Motto:—"The farmer is of more consequence than the farm, and should be first improved."

Address all correspondence for this department to  
**KENTON L. BUTTERFIELD,**  
AGRICULTURAL COLLEGE, - - MICH.

News from Michigan Granges is especially solicited.

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Lecturer—Jason Woodman, Paw Paw.  
Steward—George L. Carlisle, Kalkaska.  
Assistant Steward—Wm. Robertson, Hesperia.  
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### MORE GRANGE NEWS.

Our Grange News column is shamefully low. From 250 Granges in the State, most of them meeting at least once in two weeks, we should receive news reports enough to make at least two columns of brief, pithy, interesting reading. Wake up, correspondents, and let us know what you are doing!

### A PROGRESSIVE STEP.

The action of the Board of Regents of the Kansas Agricultural College in making wholesale dismissals from the faculty because of political motives deserves the severest condemnation. But on the face of affairs at least the Regents have inaugurated a reform that betokens genuine progress. The Board says: "We believe the time has fully come when the producing classes must grapple scientifically and intelligently with the principles governing distribution and exchange." They also announce as one of their purposes, "to increase the amount of economic and sociological work in the required course, and to ascertain if possible, by scientific investigation, the causes of industrial depression and the path to truer individual and general prosperity." The Regents have backed up their professions by electing as president of the college a Harvard graduate whose specialty is political economy, and also by making him professor of economics. Prof. Bemis, a Johns Hopkins graduate, and well-known as a progressive but level-headed economist, is to be professor of economic science. Prof. Frank Parsons, a radical writer and thinker, and a graduate of Cornell, is to be professor of history and political science. Prof. Bemis especially is an acquisition Kansas may be proud of. He resigned from the University of Chicago, under pressure, a martyr to honest views regarding the duties of employers. He is the same man of whom it was suggested that Gov. Pingree would appoint him State Commissioner of Labor.

A recent writer in the Outlook asserts that college professors are to-day the true leaders of public opinion in economic and political lines. If this be true, it is highly important that the colleges grasp the real problems confronting the masses. It is especially appropriate and necessary that the agricultural colleges should endeavor to solve the agricultural problems. Many thinkers to-day avow that the agricultural problem is largely economic and social. There is, therefore, no escape from the conclusion that our agricultural colleges should seek to "ascertain if possible, by scientific investigation, the causes of industrial depression," and point out to the farmers the "path of truer individual and general prosperity." If undertaken honestly and pursued with the sole aim of arriving at and promulgating the truth, results can only be of the first magnitude.

### THE FRESH AIR WORK.

We quote below from the Detroit "Free Press" of August 12. It is pleasant to know that the work has this season made a satisfactory increase over that of last year. The efforts of the Grange are eliciting much interest among the philanthropically inclined of Detroit's people:

"The Grange fresh air fund is carrying on a great work this season in providing poor mothers and children with an outing in the country. At a meeting of the committee yesterday morning it was reported that 89 persons had been assisted in this manner thus far this season. This record shows an increase of more than 10 per cent over the work accomplished up to this time last year. In addition to those who have already been assisted, provision has been made for 25 or 30 more, who will leave for the country in a few days. Miss Mason, the agent in charge of the work, reported at yesterday's meeting of the committee that many children had been deprived of the privilege of an outing because of a lack of sufficient clothing. It has been possible in some cases to provide for them, but there have been many instances where it has been impossible to secure the clothing the little ones need in order to be in a condition to receive the privilege of an outing. Contributions of children's clothing and shoes will be gratefully received by Miss Mason at her home, 67 Erskine street. "About \$125 has been contributed to the Grange work this season, and a few more subscriptions of from \$1 to \$5 are necessary to complete the work up to September 10. The children who are sent into the country are mostly under 12 years and over 5 years of age. Contributions from Miss Sylvia Allen, \$2, and a 'friend,' \$2, were reported at yesterday's meeting."

### "UNITED, WE STAND."

Last winter Mr. Caspar Whitney, a noted critic of athletic contests, in analyzing the reasons for the success of a certain football team, said that while the team possessed good individual players, the secret of their victory lay in the fact that the eleven young men played as one man. They thoroughly learned the lesson that by sinking their desires to make brilliant individual plays and by uniting their separate talents into a united whole, they became invincible.

Would that by playing football, or in some other way, the coming generation of farmers could thoroughly learn this same lesson, which their fathers have been slow to learn. Would that they could sink all jealousy, all distrust, all selfishness, and realize that only by the heartiest co-operation can the best interests of the farming community be subserved. Would that we could have more "team work" among the farmers. One man, however talented and brave, is puny and useless compared with an army of men. Why do not farmers flock to the Grange, where they can co-operate for mutual advantage, instead of remaining isolated, lonely, discontented?

### A NOTABLE COMPLIMENT.

The August "Review of Reviews" speaks thus of the present administration of the Department of Agriculture at Washington:

"It is without any hesitation that we express the opinion that the best work of the United States government is going on at the present time under Mr. Wilson's direction in the various bureaus of the Agricultural Department. That Department is promoting the most interesting experiments in the improvement of roads; it is finding new outlets at improved prices for American dairy products; it is lending every possible aid to the promotion and culture of sugar beets; it is working for the cause of forest preservation and modern forestry methods, and it is doing a hundred other things for the welfare of the farming community."

While this is not expert testimony, nevertheless the compliment is a notable one. Secretary Wilson and his assistant, Bro. Brigham, are winning golden opinions from every source. They have the true interests of the farmer at heart, and seem to possess the ability to perform work which will prove of substantial value to agriculture.

### CONDITION OF THE FARMER.

The same magazine quoted above has also the following to say about better prospects for farming:

"The farmers of the western states have had so hard an experience in recent years that they have been driven to the utmost economy. Their ambition is not so great as it was eight or ten years ago, and better times will scarcely tempt them to the freedom of expenditure and generous style of living that was common in many parts of the west in the "boom" period. They will be disposed to make use of returning prosperity for the reduction of their indebtedness. Indeed the past year has witnessed a very steady reduction of farm mortgages. It was reported from Omaha on July 15 that a careful estimate shows about \$28,000,000 of farm indebtedness paid off in the one state of Nebraska during the preceding six months. Reports from Kansas also show that the better crops and better prices of the past season or two have begun to tell most satisfactorily upon the financial condition of the farmers. In the best parts of these two states, as in Iowa and Illinois, agriculture is upon a thoroughly solid and assured basis. Farmers are learning that they must adapt themselves to new conditions and that, whereas in the period of the rapid development of the western wheat lands, farming was as speculative an affair as placer gold-mining, it has now come to be a business that can only be made profitable by great attention to details, by diversity of crops, and by the application of improved methods. Science holds the key to the future of American farming, and science just now is most ably personified in Mr. Wilson, the Secretary of Agriculture."

### GRANGE NEWS.

The next meeting of Eaton County Grange will be held with Windsor Grange, of Dimondale, Aug. 25. All Patrons are cordially invited to attend. Mrs. Nichols, of Delhi Mills; Mrs. Shaw, of Charlotte; Mr. O. B. Lake, of Eaton Rapids, and Bro. Nat. Hull, of Dimondale, will have special papers.

M. A. JACOBS, Lect.

A grand picnic is to be held in Thomas Grover's woods, near Alma, Gratiot Co., August 27. The exercises and arrangements will be under the joint management of Gratiot County Grange and the Emerson and Lafayette Farmers' Clubs. Mrs. Mary A. Mayo, of Battle Creek, will deliver an address at 2:30 p. m. Patrons from neighboring counties are cordially invited to attend.

Cleon Grange can boast of having a member who is now in his seventy-sixth year and still quite active. At our last meeting one of the members brought a specimen of sand vetch grown in this section, which was labeled and hung in the hall for the benefit of those who do not belong to the Order. The program was commenced by calling the roll, each member answering to his name with an appropriate quotation, such as "common sense in an uncommon degree is

what the world calls wisdom." At the close Mary Park, a girl of thirteen, who is usually ready with good recitations, favored us with a good one on "Improving the present time, as that only is ours."

Manistee Co.

COR.

Rome Grange, No. 293.—There were 34 members present at the last meeting of Rome Grange, held Saturday evening, August 7th. A short program was rendered. A paper was read by Sister Lucy Skeels, "Should farmers always sell the best they raise?" As a rule, the writer thinks it is better to sell the best because of the greater profit, and the poorer products of the farm would furnish better food than the majority of other people, engaged in other occupations, live on.

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### SELECTION OF TOPICS.

In almost every subordinate Grange a great deal of time is wasted, so to speak, in idle talk which might be more profitably employed. Almost every question pertaining directly to the farm has been discussed over and over again, perhaps, but there are other things of quite as much importance for instance, those pertaining to the moral and intellectual side of man which do not receive the proper amount of attention.

I do not see why courses of study cannot be profitably taken up in the Grange.

Good books are becoming so cheap that almost any subject might be taken up in the most interesting and systematic manner at very little expense.

Reading circles might be formed, each member having some topic to read up, reporting the result of his reading at next meeting, letting others add what they know of the topic, allowing short informal discussions to follow the report of the most interesting subjects.

In this way much valuable information would be acquired as well as systematic habits of study formed which would prove of inestimable value, especially to the younger members.

There are many interesting questions suitable for discussion and many which actually call for our attention. There is one in particular which is agitating, or ought to be agitating, the mind of every country person—that of grading the country schools. If every Grange would take its own town as its especial portion, or lot, and each try to make the schools of its town superior to all others, what a grand work might be accomplished?—Bertha E. Browne, at Arcostook, Me., Pomona.

The suggestion in the above quotation is worth dwelling on a moment. The office of lecturer of a subordinate Grange is a trying one, but of vital importance. Its possibilities are beyond computation. The two questions of "interest" and of "profit" are often at war. "What will interest so and so?" is not always that which will be of most profit. Sometimes it appears rather formidable to suggest or undertake anything so substantial as a reading course. Yet some Granges eagerly take hold of that very thing. We must remember that while the Grange is a social body, it is not a play-house, consequently serious business should be undertaken. The suggestion of the sister is to take up a book or course of reading. Granges who have the vigor to do this will find that the Farm Home Reading Circle of the Agricultural College is just the thing in this line.

### ENCOURAGEMENT TO LECTURERS.

Be not weary in well-doing. But you say this is not the worst of it. "I am afraid I am not well doing. There is no greater interest, no larger attendance, no good results that I can see," and you say it truly; and it seems to you too sadly true; but is it so? No indeed. No true word is ever lost in God's universe. No good work shall ever fail.

It is delightful to live by sight, not by faith. But too frequently that it not the best growth that springs up in a night. In the manufacture of an implement of labor, in the building of a house, or the most massive structure, we can see the progress day by day as the work grows before our eyes and under our hands, but not so in the building up of character; there the forces are silent and unseen.

We perhaps shall never know that the impulse came from our work in the Grange hall that implanted in some heart the seeds of a grander character; that from our words grew



up, slowly perhaps, but surely, the blossoms of kind thought, the fragrance of good deeds, the inspiration to a higher and truer life.

But that is not all. Every good deed, every kind word is twice blessed; its reflex influence on one's own character, enlarging it, beautifying it, bringing into it Christlikeness, making it God-like, is the best of all.

With all these opportunities why should we be discouraged? Why should we faint? Fortunate the Grange, happy the Lecturer, and blessed the man who has found that work for others, self-denying work, is a noble opportunity.—J. W. Stockwell, Lecturer Massachusetts State Grange.

#### FUN ON THE FARM.

Some farmers seem to think that they must deny themselves and their friends all personal enjoyment in procuring the necessities of life, and trying to lay by something for a "rainy day." Anything that contributes to pleasure they seem to think a waste of time and energy that might be turned to some financial gain. It is this false and narrow view of farm life that in many instances has brought farm life into disrepute, and caused the boys and girls to leave the farm. There is no occupation that presents so many and so good opportunities for the best real enjoyments of life, as farming, if farmers but know how to take advantage of them. This is what farmers want to learn, and it should be a prominent feature of Grange work to impart this knowledge to those who are in need of it.—Exchange.

#### THE EDUCATED FARMER.

BY E. B. WARD, OVERSEER STATE GRANGE.

I have been requested to give the result of my observation of the advantages that the educated farmers have over those who have no special training to fit them for the farm and its duties, and whether it will pay the young man and young woman who expect to spend their lives on the farm, to take a course at the Agricultural College. In reply I can say with all the strength of conviction, yes. It will result in more lasting benefit to the student, in after life, than any other investment of time and a like sum of money could possibly do. I find in these trying times for farmers that there is less discontent with farm life and fewer financial failures among those farmers who have received an education at the M. A. C. than among those who have not had the same opportunity for a thorough education. I have many times asked these ex-students if they regretted the time spent at the College, and the usual answer is, "I am so well satisfied with the plan of education followed at the M. A. C. that I shall send my children there to receive their education." This is the best possible recommendation for the College from that source.

Michigan Agricultural College has many points of excellence to recommend it to the young student with limited means, but with an ardent desire for an education. The course is so constructed as to develop the body as well as the mind, furnishing light remunerative employment that gives skill in practical application of the lessons taught in the schoolroom, and gives us a robust, healthy student who will compare very favorably with the pale stripling with a stuffed brain and starved muscles sent out as a graduate of many of our educational institutions.

I have always found that the M. A. C. student, if a thorough student, makes a good business man, being very thorough in his business and capable of turning in and doing a little rough work when the occasion requires it.

Many farmers neglect the education of their children, and having received few such advantages themselves, fail to see the necessity of it for their children. To such, let me say: We live in an age of progress which demands much of us, among other things educated men and women on our farms and in our farm homes. Our boys and girls are to fill these positions in the future. Let us meet this demand made on us by giving them a course at our Agricultural College.

Charlevoix, Mich.

G. A. R. Encampment, Buffalo, via Michigan Central.

In addition to its numerous regular trains, special trains leaving Detroit at 12:30 noon Aug. 21st and 23rd, in addition to the Detroit Post train, leaving at 9 a. m. and the Department Commanders' train, leaving at 11:45 p. m., Aug. 23, have been arranged for by the Michigan Central to provide ample accommodations for its patrons.

#### SOME THINGS WORTH THINKING ABOUT.

Col. J. H. Brigham, Master of the National Grange and Assistant Secretary of Agriculture, recently addressed a Grange meeting in New York state. The address is a long one, but is so full of meat that we quote from it at some length:

Agriculture has been passing through a period of depression. The chief cause for this depression seems to be low prices received for agricultural products. Various causes have been assigned why prices are so low. Some of them are at the present time of partisan character, and are not proper subjects for full discussion at non-partisan gatherings. Still it is the duty of the farmer to investigate and ascertain the real and most important factors in bringing about these conditions.

There is one fact that the farmer should keep in mind, and that is, with increased production and no corresponding increase in demand, it is utterly impossible to maintain fair prices for his products. In the last few years there has been a large increase in the production of cereals. The enormous crops of wheat produced in 1891 and 1892, 612,000,000 and 516,000,000, respectively, with increased production abroad, depressed the average value per bushel from 82.9 cents in 1891 to 62.4 cents in 1892, and to 56.8 cents in 1893.

#### RECENT CEREAL CROPS.

These were the largest wheat crops this country ever produced and a large surplus accumulated. Four years of medium production followed, and the value per bushel was kept steady until 1896, when the low production of 428,000,000 bushels and decreased production abroad, causing greatly increased foreign demand, exhausted our surplus and increased the average value per bushel to 72.6 cents.

The corn crop of the United States in 1894 was the smallest that the country has had since 1881, and was 1,212,770,000 bushels. Its average value was 45.7 cents per bushel, an increase of 3.2 cents over the average of 36.5 cents per bushel for the crop of 1893. In 1895 followed the enormous corn crop of 2,150,000,000 bushels, two-thirds greater than the crop of 1894, and the next to the greatest crop that this country ever raised. This sent the value per bushel down to 25.3 cents, so that the total value of the crop of 1895 was less than that of the crop of 1894, notwithstanding the immense increase in the number of bushels raised.

The greatest of all our corn crops followed in 1896, with 2,238,875,165 bushels, and again the value went down, this time to 21.5 cents per bushel. These figures show that the larger crop of 1896 was worth \$6,712,195 less than the smaller crop of 1894.

The third greatest crop of corn ever raised in this country was that of 1889, the product being 2,100,000,000 bushels. Its value per bushel was 28.3 cents, a drop of 5.8 cents from the value of the crop of 1883, which was itself a large crop (1,983,000,000 bushels), and had a depressing effect of 10.3 cents upon the value per bushel in comparison with the value of the preceding year.

So with the great corn crop of 1891, 2,000,000,000 bushels. The crop of the preceding year had been only 1,500,000,000 bushels, with an average value per bushel of 50.6 cents; but the enormous crop that followed in 1891 depressed the value per bushel 10 cents.

The history of the production of oats, rye and barley is very similar to that of corn and wheat, and the effect upon the prices the same. During this time the farmer has been in direct competition with the cheapest land and labor in the world in the production of cereals. Under such conditions it would be remarkable if there were not a market decline in prices. There may have been some other causes, such as gambling in farm products, combinations to control prices in the central markets, which have had some influence, but it seems very clear that the chief and controlling factors have been supply and demand.

#### TAXATION.

The farmer has also been at a disadvantage in the unequal distribution of the burdens of taxation. There has been no reduction in this burden; rather an increase, because of the fact that public expenses have not decreased and the very wealthy classes and corporations have quite successfully evaded their fair proportion of the tax. This subject should certainly receive the earliest consideration of every farmer and a vigorous effort

should be made to equalize taxation. No other cause has operated so much to the disadvantage of the farmer as the fact that with decreased prices for his products there has been no corresponding decrease in the cost of his help.

Another cause for hard times is the contracting of unnecessary indebtedness in buying new and expensive farm implements when those in use would do the work fairly well and last for years if properly cared for. In professional and in many other charges the expense of the farmer has not been reduced, all of which has a tendency to make hard times for the farmer. I think none of the above facts will be controverted. Now,

#### WHAT ARE THE REMEDIES?

The first thing that suggests itself to my mind is diversification of our agricultural products. We are now importing from foreign countries agricultural products of an average value of \$389,651,012, which is a little more than one-half of all our importations of all kinds. Some of these importations cannot be profitably produced here; a large share of them can and ought to be produced here by American farmers. This would give employment to labor in this country and keep at home the millions that go abroad to pay for foreign labor. Such diversification would also reduce the production of the cereals which have been produced in late years at a loss. It is folly for us to try to force upon consumers more of any product than their wants demand. We must learn to supply them with what they want and then make them pay fair prices for the same. In this way we may exercise some control over our business and realize some profit on our labor and investment.

#### THE DEPARTMENT OF AGRICULTURE

Is making an earnest effort to bring about such results. We are seeking to bring about such diversification by increasing the demand for our dairy and meat products in foreign countries. We are also encouraging farmers to experiment to see if we cannot produce in this country all the sugar required by our people, and by so doing reduce the acreage in cereal, open new avenues of labor for our workmen and keep at home the hundred millions that now go abroad to pay for foreign sugar.

The department is also making an effort to secure better reports showing crop conditions in this and other countries. It will be the aim of the department to furnish to the farmers information that will be of value to them in their farm operations.

#### SELF-DEPENDENCE.

Very much, however, will depend upon the farmer himself. He must understand that self help must be his chief reliance. He must give due attention to matters of legislation in the state and in the nation. He must be able to defeat unfriendly legislation and secure such as will by proper means encourage and protect agriculture. It is greatly to his discredit that he has been bearing an unequal share of the burdens of taxation, as every intelligent citizen understands perfectly well that this is not necessary. The farmers have in their own hands the remedy. They must secure fair representation in legislative bodies. Professional legislators and representatives of corporate interests should be permanently retired and good, substantial farmers and business men put in their places. Until we do this we can hardly expect fair treatment for agriculture. If we do not apply this remedy promptly and vigorously we have no just cause of complaint.

#### THERE IS ONLY ONE WAY

In which the farmers can make their power available for the protection and promotion of their interests, and that is through organization. Individually we can accomplish very little, but if once united and in condition to co-operate intelligently there is no human power that can successfully oppose or wrong the men and women who live upon the farms of our country. The organized influence of the farmer has already accomplished much. It has been felt in public places. This should inspire us with hope. Some of our national legislators, prompted by such influences, have refused to be bound by the policy of their party if such policy were not in their judgment equitable and fair to the farmers.

The farmer should be the most patriotic of all our citizens. Whilst he should be true to his own interests and stand for his rights, he must also recognize the rights of others. Pessimism, rancor and unreasonable denunciation of those engaged in other callings can

only do him harm; a fearless, intelligent stand for his own rights and interests will win him the respect of every good citizen. It should be the determination of all progressive farmers to do all they can individually and collectively through agricultural organizations to bring about better conditions for the farmer. If all will do this, we may rest assured that the future will bring more satisfactory conditions to those of us who are engaged in tilling the soil.

#### \$5.05—To Buffalo and Return—\$5.05 via Michigan Central.

The National Encampment of the G. A. R. is held at Buffalo the week of Aug. 23d. For the occasion the Michigan Central have authorized a rate of \$5.05 from Detroit for the round trip. Correspondingly low rates from all other stations on its system. Tickets will be sold Aug. 21, 22 and 23, inclusive, good for return until Aug. 31st. Extension of time may be secured by deposit of ticket with Joint Agent at Buffalo. Full information at Union Ticket Office, corner of Woodward and Jefferson avenue, or station foot of Third St.

#### Island Lake and Grand Lodge—Excursion Sunday, Aug. 22.

The Detroit Newsboys Association Band will accompany the D. G. R. & W. R. R. excursion train leaving Detroit at 8:00 a. m. for Grand Lodge. They will play at various stations along the way, and during the afternoon on 7 Islands. Round trip rate to Island Lake 50 cents and to Grand Lodge \$1.00.

GEO. DEHAVEN, G. P. A.

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## THOUGHT THE BEAR A CALF.

"When I was at college," said our host of the evening, "I thought I knew everything, but time changed my florid opinion of myself, and it does me good to recall some of the occasions when I was tumbled down without much ceremony from my high altitude.

"One of those was while I was spending my vacation at home with a college mate who was as premature as myself. We were in that dreadful initiatory state when we addressed each other in the dead languages and made life a burden to everybody by the long words of our colloquies.

"My father generously placed a couple of horses at our disposal, perhaps in the hope that we would break our foolish necks, and one evening when we mounted after sunset for our evening ride he asked us to look up a stray calf which had escaped from a pasture near the house.

"It's a black critter," said my father, 'and as frisky as they make 'em. You can jest run him in an' not give him time to get the turn on you, an' I'll be down to open an' shet the gate.'

"We had our ride, and we found the calf. By that time it was dark—not Egyptian darkness, but the dusk of a starlit summer sky. The calf was browsing on the edge of a lonely piece of woods and at first paid no attention to our attempts to start it homeward. Our horses shied at the animal, and it was all we could do to manage them. My friend suggested that one of us dismount and drive the 'bovine.'

"Excuse me," I answered, 'I never had any love for farm amusements, of which driving unwieldy calves is the least enticing. If we can't drive Mr. Calf with our present force we'll leave him in the lurch. I am strongly inclined to do that as it is.'

"Don't be disagreeable, Tom," said my friend, 'it's the first favor the governor has asked of us. Let him see that we mean well.'

"With that he whipped up his horse and I followed suit, so the calf had to move on or be run over, and snorting indignantly he trotted on ahead, but with so many diversions after sweet spots of clover and other delicacies that we thought we had an all-night job.

"At last we sighted the gate, and as we reached it we closed up on the calf in such a way that we run him through it and past the old man before he had a chance for one of his clumsy double and twisted jumps in another and opposite direction.

"But what was our surprise to see the governor take to his heels with the agility of a boy and go sprinting up the lane to the house like a prize runner, getting inside of the porch and pulling the door closed after him.

"Who is going to put the calf in the pasture?" I shouted after him.

"Calf!" he roared out of the porch window, 'calf, you infernal fool—that's a big black bear, and he'll chew you into sausage meat if you stay out there!'

"It was a fact, and the bear story getting out, we college boys got such a roasting that we shortened our vacation and went back to the halls of learning, where they didn't know any better than we did the difference between a bear and a calf."

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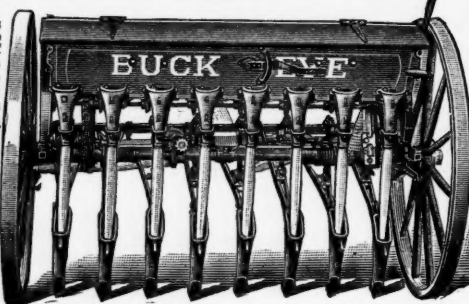
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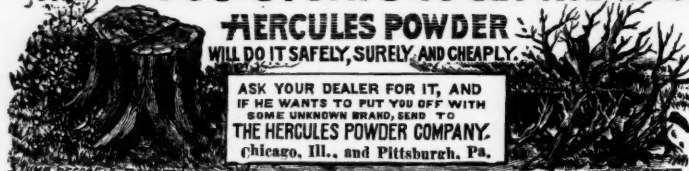
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